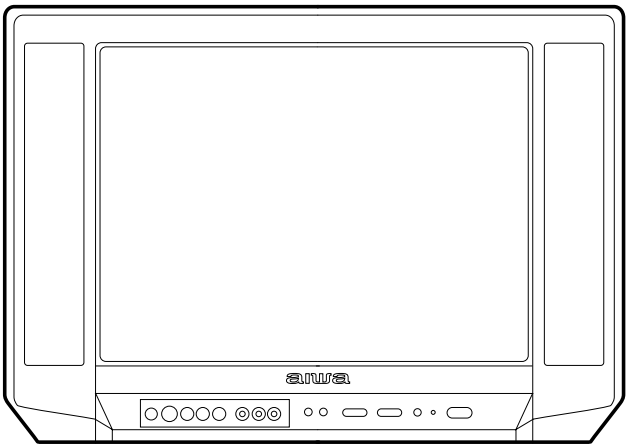
aiwa SERVICE

TV-F2400 U



SERVICE MANUAL

COLOR TELEVISION

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” (S/M Code No. 09-005-431-9T1).
- This Service Manual does not include “ADJUSTMENT”. This item will be issued in the next Supplement.

aiwa

S/M Code No. 09-007-431-9R1

REVISION DATA

SPECIFICATIONS

Tuner System	Frequency synthesized tuner
TV System	NTSC-M
Channel Coverage	VHF: 2 to 13 UHF: 14 to 69 CATV: 5A, A-1 to A-5, A to W, W+1 to W+84
Program Memory	181
Antenna Input	75 ohms, unbalanced
Picture Tube	24 in.
Screen Size	478 (W) x 359 (H) mm ($18^{7}/_{8}$ x $14^{1}/_{4}$ in.) 598 mm (diagonal) ($23^{5}/_{8}$ in.)
Video Input	1 Vp-p 75 ohms
Audio Input	0.5 Vrms., more than 33 k ohms
Speaker	120 x 60 mm ($4^{3}/_{4}$ x $2^{3}/_{8}$ in.)
Operating Voltage	120 V AC, 60 Hz
Power Consumption	125 W
Phones Jack	Stereo-mini jack
Operating Temperature	5 °C – 40 °C
Operating Humidity	35 % – 80 %
Dimensions	690 (W) x 506 (H) x 485 (D) mm ($27^{1}/_{4}$ x 20 x $19^{1}/_{8}$ in.)
Weight	33.7 kg (74.14 lbs.)

• Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JE7-951-010		RC UNIT,RC-ZVT24
2	8A-JE5-901-010		IB,U (ESF) -F2400/2000
⚠ 3	87-B30-311-010		ADAPTOR,300 75 TSN-02
4	8A-JE5-904-010		BAT,R6P ATC

To make the best use of this equipment, make sure to obey the following items when repairing (or mending).

1. Do not damage or melt the tunicate of the leading wire on the AC1 side, including the power supply cord.
2. Do not soil or stain the letters on the spec. inscription plates, notice labels, fuse labels, etc.
3. When repairing the part extracted from the conducted side of the board pattern, fix it firmly with applying bond to the pattern and the part.
4. Restore the following items after repairing.
   1) Conditions of soldering of the wires (especially, the distance on the AC1 side).
   2) Conditions of wiring, bundling of wires, etc.
   3) Types of the wries.
   4) Attachment conditions of all types of the insulation.
5. After repairing, always measure the insulation resistance and perform the voltage-withstand test (See Fig-1).

1) The insulation resistance must be 1 MΩ when applying 500V per second.
2) In the voltage withstand test, apply 1 kV for 1 minute and check that the GO lamp lights.

* Breaking current set to 10 mA.
* Connect the safety checker as shown in Fig-1, then measure the resistance and perform the test.
* Do not touch the equipment during testing.
* For details of the safety checker, refer to the supplied Operation manual.

Insulation resistance: 1 MΩ (500 V/s)
Voltage-withstand: 1 kV for 1 minute

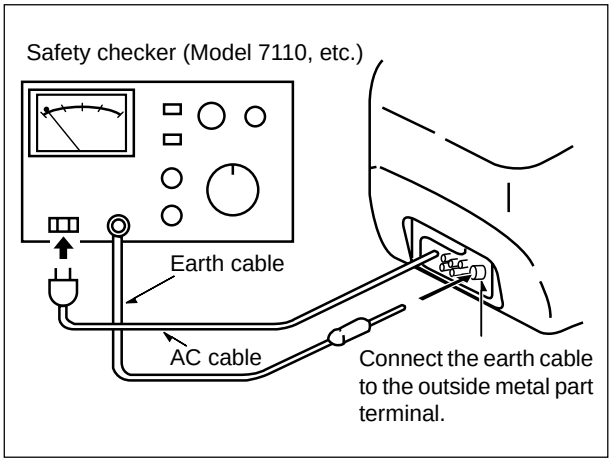


Fig-1

When servicing and checking on the TV, note the followings.

1. Keep the notices.
   As for the places which need special attentions, they are indicated with labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.
2. Avoid an electric shock.
   There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.
3. Use the designated parts.
   The parts in this equipment have the specific characteristics of incombustibility and withstand voltage for safety.
   Therefore, use a part which has the same character as the replaced part. Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts with a ⚠ mark, the designated parts must be used.
4. Put parts and wires in the original position after assembling or wiring.
   There are parts which use the insulation material such as a tube or tape for safety, or which are assembled so that these parts do not make contact with the printed board. The inside wiring is designed not to get close to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.
5. Take care of the cathode-ray tube.
   By setting an explosion-proof cathode-ray tube in this equipment, safety is secured against implosion. However, when removing it or servicing from the back, it gives out shock that is dangerous. Take enough care to deal with it.
6. Avoid an X-ray.
   Safety is secured against an X-ray by giving considerations to the cathode-ray tube and the high voltage peripheral circuit, etc. Therefore, when repairing the high voltage peripheral circuit, use the designated parts and do not change the circuit. Repairing, except indicates, causes rising of high voltage, and the cathode-ray tube emits an X-ray.
7. Perform a safety check after servicing.
   Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are deteriorated portions around the places serviced.

⚠ Safety Components Symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to confirm to special Safety Specifications.
Therefore, when replacing a component with this symbol make absolutely sure that you use a designated part.

DISASSEMBLY INSTRUCTIONS

1. REAR CABINET REMOVAL

(1) Remove four screws 1 , and three screws 2 , then remove the rear cabinet in the direction of the arrow. (See Figure1-1)

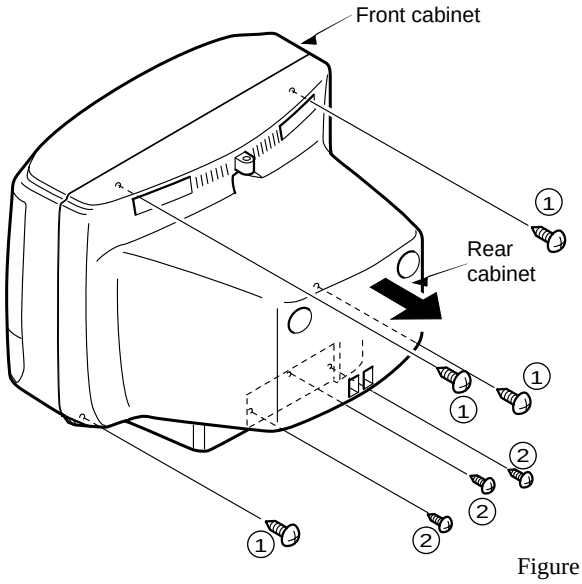


Figure 1-1

2. HIGH-VOLTAGE CAP (ANODE CAP) REMOVAL

2-1. Cautions before Removing

Discharge the anode voltage

(1) The anode voltage is not discharged completely from the CRT of this unit even after the power is turned off. Be sure to discharge the residual anode voltage before removing the anode cap.

Do not use pliers

(2) Do not use pliers, etc. to remove the anode cap. If you used pliers and bent the hook to remove the cap, the spring characteristics of the hook could be lost, and when reinstalled, the cap would come off from the CRT anode button easily, causing an accident.

Do not turn the anode cap

(3) If the anode cap is turned in the direction of its circumference, the hook is likely to come off.

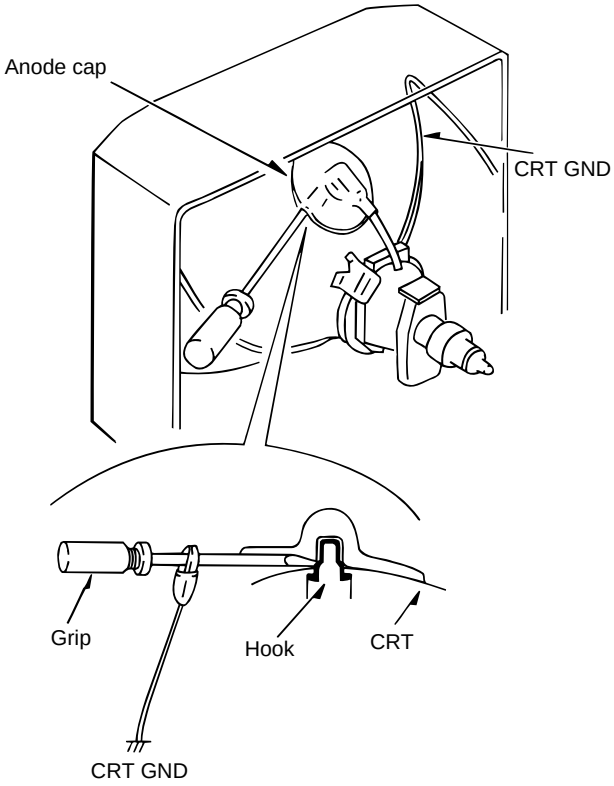


Figure 2-1

2-2. Anode Cap Removal

Discharge the anode voltage. (See Figure 2-1)

(1) Connect a flat-bladed screwdriver to the CRT GND via an alligator clip.
(2) Use a tester to check the end of the screwdriver and ground of the TV for continuity.
(3) Touch the hook with the end of the screwdriver.
Caution : Be careful not to damage the anode cap.
(4) Turn over the anode cap.
Caution : Be careful not to damage the anode cap.

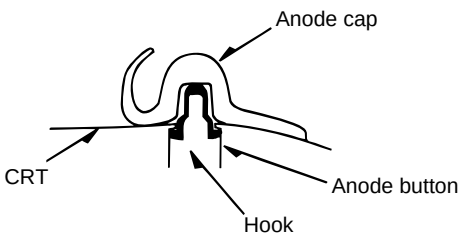


Figure 2-2

(5) Push the anode cap with your thumb in the direction of arrow 1 as shown in the figure, then lift the cap in the direction of arrow 2 to release the hook on one side. (See Figure 2-3)

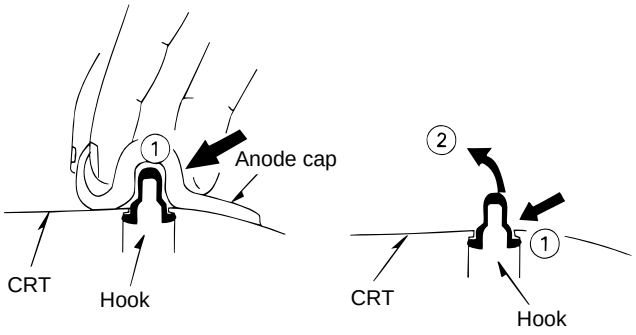


Figure 2-3

(6) Turn over the anode cap on the side where the hook was released and pull out the cap in the direction opposite to that on which the cap was pushed. (See Figure 2-4)
Caution : Do not pull out the anode cap straight up.
: Do not pull the cap forcibly. After removing the cap, check that the hook is not deformed.

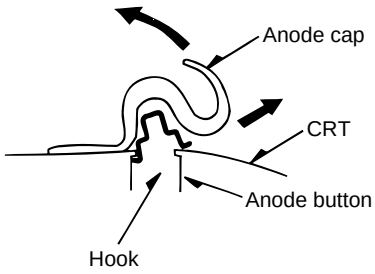


Figure 2-4

3. ANODE CAP REINSTALLTION

Observe the cautions carefully so that no accident occurs due to a defect in installing the anode cap and so it does not come off.

3-1. Caution before Reinstalling

Never turn the anode cap after installing it

Never re-use the hook when it has been deformed

(1) If the anode cap is turned after it is installed, it may come off. Therefore, arrange the high-voltage cable before attaching the anode cap. (See Figure 3-1)
(2) If you have attached the anode cap before arranging the high-voltage cable, arrange the cable carefully so the cap does not turn.

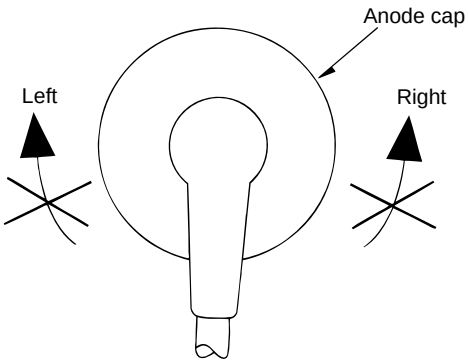


Figure 3-1

3-2. Anode cap reinstallation

(1) Use a clean cloth moistened slightly with alcohol to clean the installation section. (See Figure 3-2)
Caution : Check that the installation section is free from dust, foreign matter, etc.
(2) Coat the anode cap installation circumference with an appropriate amount of the specified silicone grease (KS-650N).
Caution : Be careful that silicone grease does not enter the anode button.

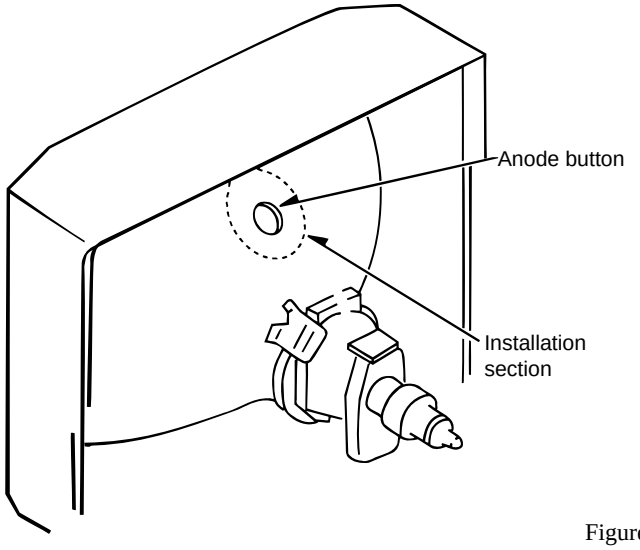


Figure 3-2

(3) Eliminate twisting, etc. of the high-voltage cable and arrange it so that no twisting occurs. (See Figure 3-3)
Caution : If the cable is not arranged correctly, the anode cap could turn and cause an installation defect.

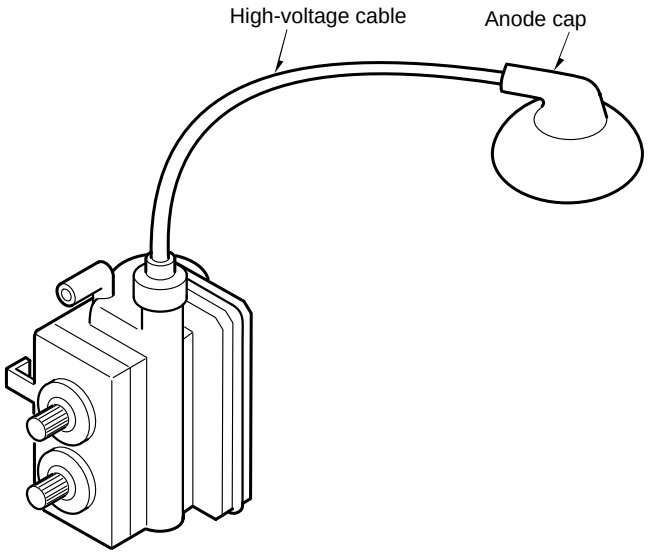


Figure 3-3

(4) Turn over the rubber cap symmetrically on the left and right. (See Figure 3-4)
Caution : Take great care not to damage the anode cap.

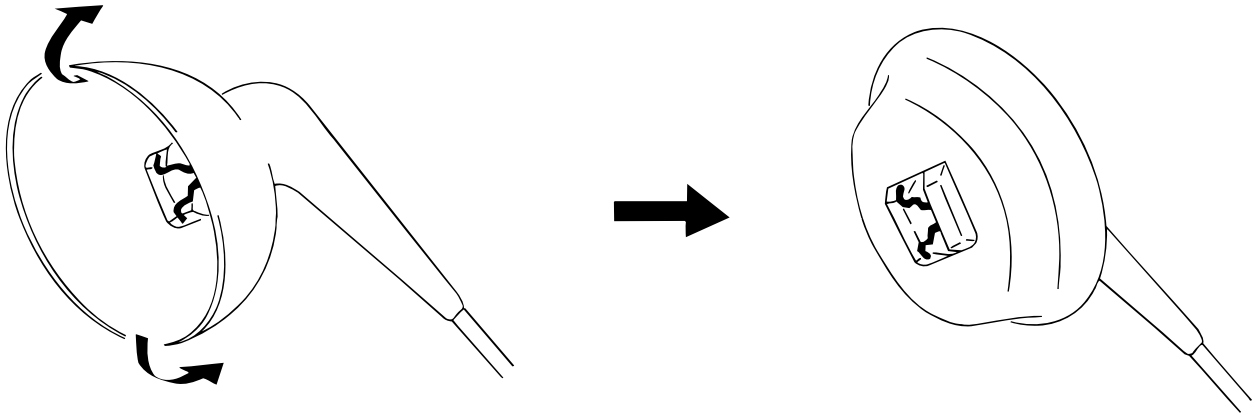


Figure 3-4

(5) Fit your forefinger over the projection at the center of the cap and hold the cap between your thumb and middle finger. (See Figure 3-5)

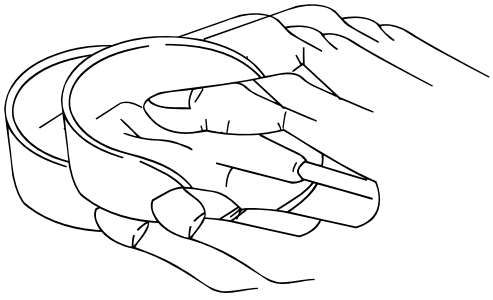
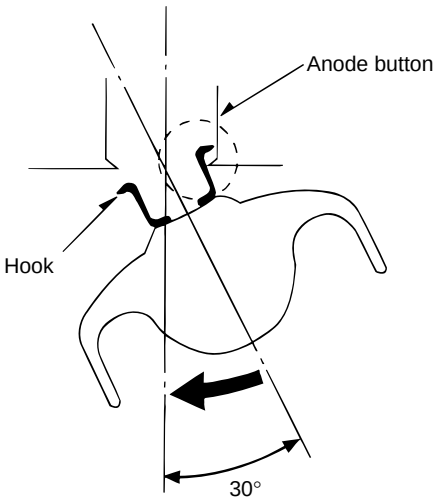


Figure 3-5

(6) Apply the hook on one side to the anode button as shown on the figure. (See Figure 3-6)
Caution : Check that the hook is held securely.
(7) Apply the hook on the other side to the anode button as shown in Figure 3-7.



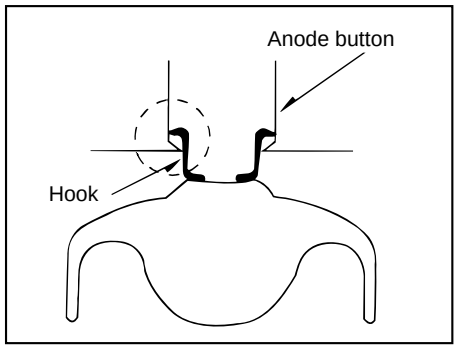


Figure 3-7

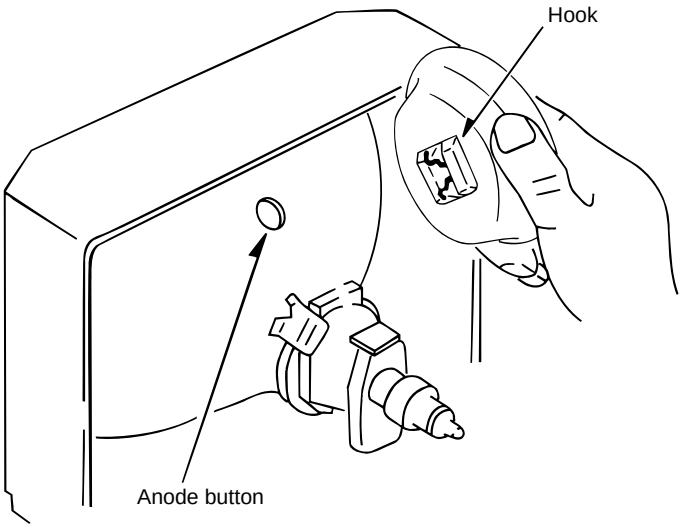


Figure 3-6

(8) Pull the anode cap slightly with the rubber cap turned over and visually check that the hook is engaged securely.
(9) Release your hand from the rubber cap of the anode cap.
Caution : Cover the anode cap so that it does not lift.
(10) Hold the skirt of the andoe cap slightly to improve the close contact between the cap and CRT.
(11) Check that the anode cap is in close contact with the CRT. (See Figure 3-8)

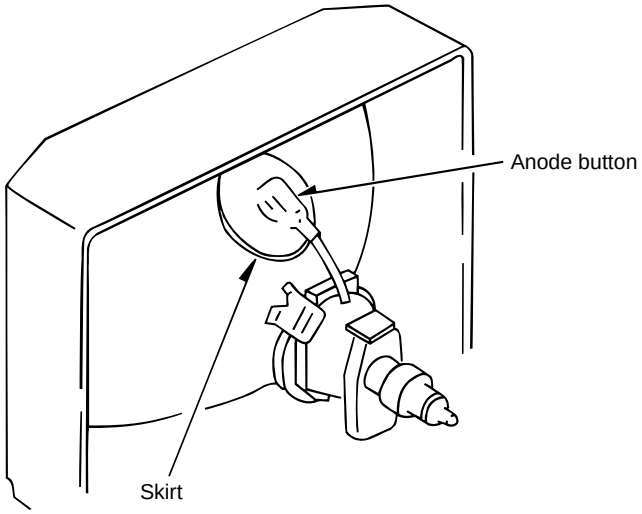


Figure 3-8

4. NK C.B REMOVAL

(1) Disconnect CN903 (CRT GND).
(2) Disconnect CN901, CN902, CN951, CN952.
(3) Remove the NK C.B in the direction of arrow 1 .
(See Figure 4-1)

5. MAIN C.B REMOVAL

(1) Remove connector (CN404).
(2) Remove connector (CN882).
(3) Remove connector (CN807).
(4) Pull out the MAIN C.B in the direction of the arrow 2
(See Figure 4-1).

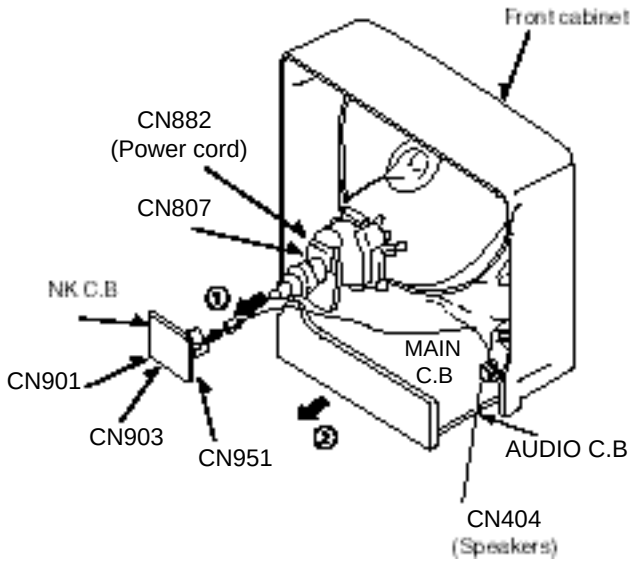


Figure 4-1

ELETRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-JE7-621-010		IC,M37272MA-052SP
	87-A91-538-010		RCR UNIT,SBX1981-72P
	87-A21-378-010		IC,S-24C04BDP-1A
	87-A20-611-080		IC,M51943BSL-700A
	87-001-536-010		IC,NJM78M05FA
	8Z-JBJ-605-010		IC,TA1268N
	87-A21-103-040		C-IC,MM1454XFBE
	87-A21-022-040		C-IC,BA3880FS
	87-A21-554-010		IC,TA1216AN
	87-A21-283-010		IC,AN5277
	87-A21-220-010		IC,MM1311AD
	87-A21-219-010		IC,TC90A45P
	87-A21-456-010		IC,LA7833
	87-070-417-010		IC,NJM4558DD
	8Z-JBH-605-010		IC,CXA2104S
	87-A21-468-010		IC,STR-F6626
	87-A21-491-010		IC,SE125N
	87-020-969-010		IC,NJM78M09FA
	87-A20-389-010		IC,NJM7809FA
TRANSISTOR			
	87-A30-065-080		TR,2SC2785FE
	87-026-269-080		TR,DTA114ES
	87-A30-066-080		TR,2SA1175FE
	87-026-219-080		TR,DTA144ES
	87-026-218-080		TR,DTC144ES
	89-324-122-080		C-TR,2SC2412KR
	89-110-372-080		C-TR,2SA1037K(R)
	87-A30-062-080		C-TR,KRC104S
	89-324-820-080		TR,2SC2482
	87-A30-366-010		TR,2SD2580
	87-A30-363-010		TR,2SD2531
	89-110-154-080		TR,2SA1015Y
	89-318-155-080		TR,2SC1815GR
	87-026-463-080		TR,2SA933SRS
	89-110-913-080		TR,2SA10910
	87-A30-344-010		TR,2SC5147D
	87-026-462-080		TR,2SC1740SRS
	89-407-742-080		TR,2SD774
	89-118-370-010		TR,2SA1837
	89-347-930-010		TR,2SC4793
DIODE			
	87-070-110-010		LED,SLP-181B-51 RED
	87-017-932-080		ZENER,MTZJ6.2B
	87-020-465-080		DIODE,1SS133
	87-002-743-080		ZENER,MTZJ33B
	87-A40-235-080		ZENER,MTZJ9.1C
	87-A40-690-080		ZENER,MTZJ11B
	87-A40-286-080		DIODE,RGP10JE-5025
	87-A40-348-080		ZENER,MTZJ3.3A
	87-A40-234-080		ZENER,MTZJ5.6A
	87-A40-318-080		ZENER,RM26 V1
	87-070-092-080		DIODE,S5566B
	87-A40-735-090		DIODE,ERC06-15
	87-A40-001-080		ZENER,MTZJ12C
	87-017-593-090		DIODE,RGP15J
	87-017-654-060		DIODE,GBU6JL6131
	87-A40-856-080		DIODE,UF4007
	87-A40-828-080		DIODE,AK 04
	87-A40-825-090		DIODE,RN 1Z
	87-A40-734-010		DIODE,FML-G12S
	87-A40-354-090		DIODE,UF3GL-6251
	8Z-JBH-606-010		VRIS,TNR15G271K
	87-A40-553-080		DIODE,1N4003 LES
	87-017-650-080		DIODE,1SS119
	87-A40-503-080		ZENER,MTZJ39B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
MAIN C.B			
C001	87-010-405-080		CAP,E 10-50 M 11L SME
C002	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C003	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C004	87-018-127-080		CAP,TC U 470P-50 K B UP050
C005	87-010-401-080		CAP,E 1-50 M 11L SME
C006	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C007	87-010-248-080		CAP,E 220-10 M 11L SME
C008	87-018-123-080		CAP,TC U 220P-50 K B UP050
C009	87-010-401-080		CAP,E 1-50 M 11L SME
C010	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C011	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C012	87-018-119-080		CAP,TC U 100P-50 K B UP050
C013	87-018-119-080		CAP,TC U 100P-50 K B UP050
C014	87-010-263-080		CAP,E 100-10 M 11L SME
C015	87-018-119-080		CAP,TC U 100P-50 K B UP050
C016	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C017	87-018-128-080		CAP,TC U 560P-50 K B UP050
C018	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C019	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C020	87-018-119-080		CAP,TC U 100P-50 K B UP050
C021	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C022	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C023	87-018-123-080		CAP,TC U 220P-50 K B UP050
C024	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C025	87-018-119-080		CAP,TC U 100P-50 K B UP050
C101	87-010-404-080		CAP,E 4.7-50 M 11L SME
C104	87-010-248-080		CAP,E 220-10 M 11L SME
C105	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C106	87-A10-207-080		CAP,TC U 0.01-50 K B UP050
C112	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C113	87-018-109-080		CAP,TC U 22P-50 J SL UP050
C201	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C202	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C203	87-010-400-080		CAP,E 0.47-50 M 11L SME
C204	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C205	87-010-237-080		CAP,E 1000-16 M SME
C206	87-A10-287-080		CAP,M 2200P-50 J
C207	87-010-400-080		CAP,E 0.47-50 M 11L SME
C208	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C209	87-010-385-080		CAP,E 220-25 M SME
C210	87-A11-080-080		CAP,TC U 47P-50 J CH
C211	87-A11-080-080		CAP,TC U 47P-50 J CH
C212	87-A11-080-080		CAP,TC U 47P-50 J CH
C213	87-A11-082-080		CAP,TC U 56P-50 J CH
C214	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C229	87-018-149-080		CAP,TC U 15P-50 J CH UP050
C301	87-010-403-080		CAP,E 3.3-50 M 11L SME
C302	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C305	87-018-126-080		CAP,TC U 390P-50 K B UP050
C306	87-010-405-080		CAP,E 10-50 M 11L SME
C307	87-A10-299-080		CAP,M 0.022-50 J
C308	87-010-401-080		CAP,E 1-50 M 11L SME
C309	87-018-147-080		CAP,TC U 10P-50 J CH UP050
C311	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C312	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C313	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C314	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C315	87-018-123-080		CAP,TC U 220P-50 K B UP050
C317	87-010-402-080		CAP,E 2.2-50 M 11L SME
C318	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C319	87-010-237-080		CAP,E 1000-16 M SME
C321	87-010-404-080		CAP,E 4.7-50 M 11L SME
C322	87-A10-295-080		CAP,M 0.01-50 J
C323	87-016-280-080		CAP,E 3.3-50 M BP SME
C324	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C325	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C326	87-A10-307-080		CAP,M 0.1-50 J
C327	87-018-134-080		CAP,TC U 0.01-16 N Y UP050

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C328	87-010-405-080		CAP,E 10-50 M 11L SME
C329	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C330	87-010-401-080		CAP,E 1-50 M 11L SME
C331	87-010-544-080		CAP,E 0.1-50 M 11L SME
C332	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C333	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C334	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C335	87-015-997-010		CAP,E 2200-16 M SME
C336	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C337	87-018-130-080		CAP,TC U 820P-50 K B UP050
C338	87-010-405-080		CAP,E 10-50 M 11L SME
C339	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C340	87-018-118-080		CAP,TC U 82P-50 J B UP050
C341	87-018-118-080		CAP,TC U 82P-50 J B UP050
C342	87-018-150-080		CAP,TC U 18P-50 J CH UP050
C343	87-A10-307-080		CAP,M 0.1-50 J
C344	87-A10-307-080		CAP,M 0.1-50 J
C501	87-010-405-080		CAP,E 10-50 M 11L SME
C504	87-010-393-080		CAP,E 100-35 M SME
C505	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C508	87-010-398-090		CAP,E 2200-35 M SME
C509	87-A11-245-080		CAP,M/P 0.1-100 J TF-ECQV
C510	87-010-405-080		CAP,E 10-50 M 11L SME
C605	87-A10-972-090		CAP,M/P 0.015-1.25K H DKRG
C607	87-A12-351-090		CAP,M/P 0.013-800 H DKRG
C608	87-A10-833-010		CAP,CER 1000P-2K K R LONG
C609	87-A10-975-090		CAP,M/P 0.68-250 J
C610	87-A10-833-010		CAP,CER 1000P-2K K R LONG
C611	87-010-963-080		CAP,E 2.2-160 M 11L SME
C612	87-010-976-080		CAP,CER 1000P-500 K B DD10
C613	87-016-373-080		CAP,E 10-250 M SME
C614	87-010-976-080		CAP,CER 1000P-500 K B DD10
C615	87-A10-843-080		CAP,CER 680P-1K K R
C616	87-A10-843-080		CAP,CER 680P-1K K R
C617	87-A12-082-090		CAP,E 1000-35 SMG
C618	87-A10-301-080		CAP,M 0.033-50 J
C619	87-A11-987-080		CAP,CER 6800P-250 K R HR
C620	87-010-395-080		CAP,E 330-35 M SME
C621	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C622	87-A11-124-080		CAP,TC U 2200P-50 K B
C623	87-A12-171-080		CAP,E 4.7-50 K SH
C624	87-010-975-080		CAP,CER 330P-500 K B DD10
C626	87-010-405-080		CAP,E 10-50 M 11L SME
C627	87-010-975-080		CAP,CER 330P-500 K B DD10
C629	87-A10-469-080		CAP,CER 2200P-500 K B DD10
C630	87-010-405-080		CAP,E 10-50 M 11L SME
C631	87-010-263-080		CAP,E 100-10 M 11L SME
C655	87-A11-354-090		CAP,E 100-160 M SMG
C714	87-010-221-080		CAP,E 470-10 M SME
C720	87-015-464-080		CAP,E 4.7-16 BP
C721	87-A10-292-080		CAP,M 5600P-50 J
C722	87-A10-296-080		CAP,M 0.012-50 J
C723	87-010-401-080		CAP,E 1-50 M 11L SME
C724	87-010-404-080		CAP,E 4.7-50 M 11L SME
C725	87-010-405-080		CAP,E 10-50 M 11L SME
C726	87-010-404-080		CAP,E 4.7-50 M 11L SME
C727	87-010-112-080		CAP,E 100-16 M 11L SME
C728	87-015-464-080		CAP,E 4.7-16 BP
C729	87-010-404-080		CAP,E 4.7-50 M 11L SME
C730	87-015-464-080		CAP,E 4.7-16 BP
C731	87-A10-288-080		CAP,M 2700P-50 J
C733	87-016-301-080		CAP,TN 3.3-16 K DN
C734	87-015-464-080		CAP,E 4.7-16 BP
C735	87-016-302-080		CAP,TN 10-16 K DN
C736	87-010-401-080		CAP,E 1-50 M 11L SME
C737	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C802	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C804	87-A11-308-090		CAP,M/P 0.033-630 J ECQF6(ZH)
C805	87-A10-846-080		CAP,CER 3300P-1K K R
C806	87-A12-298-090		CAP,E 820-200 M 25B SMH
C807	87-A10-568-010		CAP,PP 1000P-630 J APH
C808	87-010-384-080		CAP,E 100-25 M 11L SME
C809	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C810	87-018-129-080		CAP,TC U 680P-50 K B UP050
C811	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C813	87-018-131-080		CAP,TC U 1000P-50 K B UP050
C814	87-010-260-080		CAP,E 47-25 M 11L SME
C815	87-010-260-080		CAP,E 47-25 M 11L SME
C816	87-010-405-080		CAP,E 10-50 M 11L SME
C817	87-010-398-090		CAP,E 2200-35 M SME
C818	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C820	87-010-405-080		CAP,E 10-50 M 11L SME
C821	87-010-405-080		CAP,E 10-50 M 11L SME
C822	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C824	87-010-237-080		CAP,E 1000-16 M SME
C826	87-010-976-080		CAP,CER 1000P-500 K B DD10
C829	87-010-384-080		CAP,E 100-25 M 11L SME
C831	87-010-405-080		CAP,E 10-50 M 11L SME
C834	87-A10-733-090		CAP,E 220-160 M SK
C835	87-A10-833-010		CAP,CER 1000P-2K K R LONG
C838	87-010-397-010		CAP,E 1000-35 M SME
⚠ C842	87-012-370-010		CAP,CER 3300P-250 M E ECKD
⚠ C843	87-012-370-010		CAP,CER 3300P-250 M E ECKD
⚠ C844	87-012-370-010		CAP,CER 3300P-250 M E ECKD
⚠ C845	87-012-370-010		CAP,CER 3300P-250 M E ECKD
C846	87-A10-207-080		CAP,TC U 0.01-50 K B UP050
CF201	84-LB3-626-080		FLTR,TPS4.5MB2
CF202	84-LB3-627-080		FLTR,SFSH 4.5MDB SIF
CN001	87-009-195-010		CONN,5P V WHT EH
CN601	87-099-762-010		CONN,5P V TBL-P BOSS
CN701	87-A60-628-010		CONN,11P V 2MM JMT
CN705	87-009-262-010		CONN,8P V 52147
CN706	87-099-186-010		CONN,6P V WHT EH
CN707	87-A61-126-080		MALE, 1P TP42097
⚠ CN807	82-481-649-010		CONN,2P V VT-50P
CNA101	8Z-JE5-637-010		CONN ASSY,1P PS-MAIN
CNA103	8A-JE5-627-010		CONN ASSY,2P MAIN-S
CNA602	8Z-JE5-632-010		CONN ASSY,5P V WHT TV-NK-1
CNA604	8Z-JE5-638-010		CONN ASSY,1P FBT-PS
CNA704	8A-JE5-617-010		CONN ASSY,6P V WHT TV-NK-2
CNA801	8A-JE5-619-010		CONN ASSY,3P V MAIN-PS
CNA803	8Z-JE5-636-010		CONN ASSY,2P PS-MAIN 5V
FB001	87-008-372-080		FLTR,EMI BL01 RN1
FB002	87-008-372-080		FLTR,EMI BL01 RN1
FB003	87-008-372-080		FLTR,EMI BL01 RN1
FB004	87-008-372-080		FLTR,EMI BL01 RN1
FB005	87-008-372-080		FLTR,EMI BL01 RN1
FB006	87-008-372-080		FLTR,EMI BL01 RN1
FB007	87-008-372-080		FLTR,EMI BL01 RN1
FB301	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB601	87-003-223-080		F-BEAD, BL02RN2
FB602	87-003-223-080		F-BEAD, BL02RN2
FB801	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB802	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB803	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB804	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB805	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB806	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FB807	87-003-320-080		F-BEAD,-9.0 FBR07HA121NB-00
FR601	87-029-158-060		RES,FUSE 1-1W J
FR608	87-A00-628-090		RES,FUSE 0.68-1W J RF 1SL12.5
FR610	87-A00-628-090		RES,FUSE 0.68-1W J RF 1SL12.5
FR801	87-A00-770-090		RES,FUSE 0.1-1W J RF1SL12.5
HL001	84-LB3-216-010		HLDR,LED
J702	87-A60-324-110		JACK,PIN 6P Y-W-R W/SW
L002	87-005-614-080		COIL,100UH J LAV35
L003	87-005-614-080		COIL,100UH J LAV35
L101	87-005-614-080		COIL,100UH J LAV35
L201	8Z-JBR-612-010		COIL,SIF 4.5MHZ 504BN
L203	87-005-612-080		COIL,68UH J LAV35

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L204	87-003-282-080		COIL,12UH J LAL02
L205	8Z-JBH-610-010		COIL,PIF-SQ57EL349A 45.75MHZ
L206	87-005-614-080		COIL,100UH J LAV35
L207	87-003-147-080		COIL,22UH J LAL02
L208	87-003-143-080		COIL,4.7UH K LAL02
L301	87-003-097-080		COIL,1.0UH K LAL02
L302	87-005-614-080		COIL,100UH J LAV35
L303	87-005-614-080		COIL,100UH J LAV35
L304	87-003-282-080		COIL,12UH J LAL02
L604	87-A50-607-080		COIL,3.9MH J LHL10
L606	8Z-JE5-621-010		COIL,HLC ZJE-5
L607	87-A50-541-010		COIL,1MH 1.5AP-P
L701	87-005-614-080		COIL,100UH J LAV35
L801	87-A50-170-010		COIL,390UH RCH106
L803	87-A50-176-080		COIL,33UH-PJ87
⚠ PR601	87-A90-429-080		FUSE,1.25A 125V A 251
⚠ PR801	87-A90-409-080		FUSE,1.5A 125V A 251
⚠ PR802	87-A90-210-080		FUSE,7A 125V 251
⚠ PR803	87-A90-070-080		FUSE,3.5A 125V 251
⚠ PS801	87-A90-717-010		P-COUPLER,PC123FY2
⚠ PT801	8A-JE5-622-010		PT,U SW AJE-5
R315	87-025-380-080		RES,M/F 15K-1/6W F
R316	87-025-427-080		RES,M/F 27K-1/6W F
R506	87-A00-143-090		RES,M/F 1.0-1W J RSF(S)
R508	87-A00-653-090		RES,M/F 270-1W J RSF(S)
R604	87-A00-565-090		RES,M/F 1.2K-7W J RSU7
R612	87-A00-629-090		RES,M/F 5.6-1W J RSF(S)
R626	87-A00-676-090		RES,M/F 100-7W J RSV7
R723	87-A00-130-080		RES,M/F 62K-1/6W F
R801	87-A00-661-010		RES,CEM 27-2W J BGR2U
R802	87-A00-160-090		RES,M/F 33-2W J RSF(S)
R803	87-A00-356-090		RES,M/F 22-2W J RSS2X
R804	87-A00-633-090		RES,CEM 0.47-10W J RGC
R805	87-A00-170-090		RES,M/F 82K-3W J RSF(S)
R806	87-A00-380-090		RES,M/F 39K-3W J RSS H2
R811	87-A00-646-090		RES,CEM 0.1-5W K RGC5
R824	87-A00-315-090		RES,M/F 1K-1W J RSF(S)
R833	87-A00-199-090		RES,M/F 12K-3W J RSF(S)
R834	87-A00-223-090		RES,M/F 47K-2W J RSF(S)
R844	87-A00-254-090		RES,M/F 0.68-2W J
⚠ RY801	87-A91-390-010		RELAY,AC12V G5PA-1-8
S002	87-A91-525-080		SW,TACT SKQNLA
S003	87-A91-525-080		SW,TACT SKQNLA
S004	87-A91-525-080		SW,TACT SKQNLA
S005	87-A91-525-080		SW,TACT SKQNLA
S006	87-A91-525-080		SW,TACT SKQNLA
S007	87-A91-525-080		SW,TACT SKQNLA
S801	87-A91-410-010		SW,AC PUSH 1-1-1 ESB92SH1B
SFR501	87-024-429-080		SFR,1K H RH063MC
SFR601	87-024-434-080		SFR,22K H RH063MC
SFR602	87-024-429-080		SFR,1K H RH063MC
SFR603	87-A90-385-080		SFR,22K H DIA6 EVM
SWF201	8Z-JBH-633-010		FLTR,SAW M1969M
⚠ T601	8Z-JE5-606-010		FBT,D NX-4523 ZJE-5
⚠ T602	85-JT2-653-010		PT,HDT-TV141-2
⚠ TH801	87-A91-579-010		POS-THMS,PTH451BG3R0Q140
TU101	8Z-JBE-610-010		TU UNIT,USA ENV56D74G3
X001	87-A70-124-080		VIB,CER 8.0MHZ
X301	87-A70-007-080		VIB,XTAL 3.58MHZ AQC-1001
X302	87-030-327-010		VIB,CER 503.500KHZ CSB F30

AUDIO C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C401	87-010-404-080		CAP,E 4.7-50 M 11L SME
C402	87-A10-295-080		CAP,M 0.01-50 J
C403	87-A10-295-080		CAP,M 0.01-50 J
C404	87-A10-307-080		CAP,M 0.1-50 J
C405	87-010-404-080		CAP,E 4.7-50 M 11L SME
C406	87-010-260-080		CAP,E 47-25 M 11L SME
C407	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C408	87-010-405-080		CAP,E 10-50 M 11L SME
C409	87-010-404-080		CAP,E 4.7-50 M 11L SME
C410	87-010-404-080		CAP,E 4.7-50 M 11L SME
C411	87-010-404-080		CAP,E 4.7-50 M 11L SME
C413	87-A10-295-080		CAP,M 0.01-50 J
C414	87-A10-305-080		CAP,M 0.068-50 J
C415	87-A10-293-080		CAP,M 6800P-50 J
C416	87-010-260-080		CAP,E 47-25 M 11L SME
C417	87-010-404-080		CAP,E 4.7-50 M 11L SME
C418	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C419	87-010-404-080		CAP,E 4.7-50 M 11L SME
C420	87-010-404-080		CAP,E 4.7-50 M 11L SME
C421	87-010-404-080		CAP,E 4.7-50 M 11L SME
C422	87-A10-293-080		CAP,M 6800P-50 J
C424	87-010-260-080		CAP,E 47-25 M 11L SME
C425	87-A10-305-080		CAP,M 0.068-50 J
C426	87-A10-295-080		CAP,M 0.01-50 J
C427	87-010-404-080		CAP,E 4.7-50 M 11L SME
C428	87-010-189-080		C-CAP,S 8200P-50 K B
C429	87-012-365-080		C-CAP,S 0.027-25 K B
C430	87-010-401-080		CAP,E 1-50 M 11L SME
C431	87-010-189-080		C-CAP,S 8200P-50 K B
C432	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C433	87-010-260-080		CAP,E 47-25 M 11L SME
C434	87-012-365-080		C-CAP,S 0.027-25 K B
C435	87-010-401-080		CAP,E 1-50 M 11L SME
C436	87-010-401-080		CAP,E 1-50 M 11L SME
C437	87-010-401-080		CAP,E 1-50 M 11L SME
C438	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C439	87-A10-307-080		CAP,M 0.1-50 J
C440	87-A10-307-080		CAP,M 0.1-50 J
C441	87-A10-307-080		CAP,M 0.1-50 J
C442	87-010-401-080		CAP,E 1-50 M 11L SME
C443	87-010-405-080		CAP,E 10-50 M 11L SME
C444	87-010-405-080		CAP,E 10-50 M 11L SME
C445	87-010-405-080		CAP,E 10-50 M 11L SME
C446	87-010-405-080		CAP,E 10-50 M 11L SME
C447	87-010-405-080		CAP,E 10-50 M 11L SME
C448	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C449	87-010-402-080		CAP,E 2.2-50 M 11L SME
C450	87-010-247-080		CAP,E 100-50 M SME
C451	87-010-388-080		CAP,E 1000-25 M SME
C452	87-010-388-080		CAP,E 1000-25 M SME
C453	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C454	87-010-399-090		CAP,E 3300-35 M SME
C455	87-010-393-080		CAP,E 100-35 M SME
C460	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C464	87-010-260-080		CAP,E 47-25 M 11L SME
C465	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C466	87-A10-295-080		CAP,M 0.01-50 J
C467	87-010-401-080		CAP,E 1-50 M 11L SME
C468	87-A10-295-080		CAP,M 0.01-50 J
C469	87-A10-295-080		CAP,M 0.01-50 J
C470	87-010-154-080		C-CAP,S 10P-50 D CH GRM
C471	87-012-155-080		C-CAP,S 180P-50 J CH GRM
C472	87-A10-295-080		CAP,M 0.01-50 J
C473	87-A10-295-080		CAP,M 0.01-50 J
C474	87-A10-295-080		CAP,M 0.01-50 J
C475	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C476	87-010-260-080		CAP,E 47-25 M 11L SME
C477	87-010-316-080		C-CAP,S 33P-50 J CH GRM
C478	87-010-316-080		C-CAP,S 33P-50 J CH GRM
C479	87-010-318-080		C-CAP,S 47P-50 J CH GRM
C480	87-010-316-080		C-CAP,S 33P-50 J CH GRM
C481	87-010-316-080		C-CAP,S 33P-50 J CH GRM
C482	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C483	87-010-260-080		CAP,E 47-25 M 11L SME
C484	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C486	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C487	87-010-196-080		C-CAP,S 0.1-25 Z F C2012

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C488	87-010-384-080		CAP,E 100-25 M 11L SME
C489	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C492	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C493	87-A10-307-080		CAP,M 0.1-50 J
C494	87-A10-307-080		CAP,M 0.1-50 J
C495	87-010-400-080		CAP,E 0.47-50 M 11L SME
C496	87-010-400-080		CAP,E 0.47-50 M 11L SME
C497	87-010-405-080		CAP,E 10-50 M 11L SME
C751	87-010-545-080		CAP,E 0.22-50 M 11L SME
C752	87-010-402-080		CAP,E 2.2-50 M 11L SME
C753	87-010-545-080		CAP,E 0.22-50 M 11L SME
C754	87-010-402-080		CAP,E 2.2-50 M 11L SME
C755	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C756	87-010-545-080		CAP,E 0.22-50 M 11L SME
C757	87-010-402-080		CAP,E 2.2-50 M 11L SME
C758	87-010-545-080		CAP,E 0.22-50 M 11L SME
C759	87-010-402-080		CAP,E 2.2-50 M 11L SME
C760	87-010-197-080		C-CAP,S 0.01-25 K B C2012
C761	87-010-314-080		C-CAP,S 22P-50 J CH GRM
C762	87-010-314-080		C-CAP,S 22P-50 J CH GRM
C763	87-010-405-080		CAP,E 10-50 M 11L SME
C764	87-010-401-080		CAP,E 1-50 M 11L SME
C765	87-010-382-080		CAP,E 22-25 M 11L SME
C766	87-010-402-080		CAP,E 2.2-50 M 11L SME
C767	87-010-401-080		CAP,E 1-50 M 11L SME
C768	87-010-402-080		CAP,E 2.2-50 M 11L SME
C769	87-010-405-080		CAP,E 10-50 M 11L SME
C770	87-010-405-080		CAP,E 10-50 M 11L SME
C780	87-010-405-080		CAP,E 10-50 M 11L SME
C781	87-010-405-080		CAP,E 10-50 M 11L SME
CN401	87-009-314-010		CONN,8P V 51048
CN404	8Z-JE5-640-010		CONN ASSY,4P SP-25
CN404	87-049-469-010		CONN,4P V WHT EH
CN405	87-009-317-010		CONN,11P V 51048
CN409	87-009-033-010		CONN,5P V WHT PH
CNA402	8A-JE7-610-010		CONN ASSY,6P V WHT AU-MAIN
CNA403	8A-JE7-611-010		CONN ASSY,11P V WHT AU-VD
CNA408	8Z-JE7-663-010		CONN ASSY,2P COMB-NK
CNA414	8A-JE7-626-010		CONN ASSY,1P AU-MAIN
DL401	87-A91-598-010		DELAY LINE,350NS EQFK5-MT
FR401	87-A00-478-090		RES,FUSE 2.2-1W J
FR402	87-A00-478-090		RES,FUSE 2.2-1W J
J401	87-A60-420-010		JACK,3.5 ST (MSC)
J402	87-A61-296-010		JACK,PIN 3P +S ALL GOLD YKC22-
L401	87-005-614-080		COIL,100UH J LAV35
L403	87-005-614-080		COIL,100UH J LAV35
L404	87-005-614-080		COIL,100UH J LAV35
L405	87-003-284-080		COIL,27UH J LAL02
L406	87-003-284-080		COIL,27UH J LAL02
L407	87-A50-555-010		COIL,100UH K 7212M-101K
R432	87-A00-739-090		RES,M/F 1-7W K RSV7
R447	87-A00-667-090		RES,M/F 680-2W J RSF(S)
R448	87-A00-667-090		RES,M/F 680-2W J RSF(S)
W401	8A-JE7-612-010		F-CABLE,8P 2.0 70MM
W405	8A-JE7-613-010		F-CABLE,11P 2.0 70MM

NK C.B

C901	87-010-405-080		CAP,E 10-50 M 11L SME
C902	87-010-968-080		CAP,CER 680P-2K K B
C903	87-010-405-080		CAP,E 10-50 M 11L SME
C906	87-010-400-080		CAP,E 0.47-50 M 11L SME
C907	87-010-235-080		CAP,E 470-16 M SME
C908	87-A11-108-080		CAP,TC U 680P-50 J CH
C909	87-A11-110-080		CAP,TC U 820P-50 J CH
C910	87-A11-108-080		CAP,TC U 680P-50 J CH
C911	87-A11-106-080		CAP,TC U 560P-50 J CH
C912	87-A11-106-080		CAP,TC U 560P-50 J CH
C913	87-A11-106-080		CAP,TC U 560P-50 J CH
C914	87-A10-052-080		CAP,E 2.2-250
C915	87-010-260-080		CAP,E 47-25 M 11L SME
C916	87-018-134-080		CAP,TC U 0.01-16 N Y UP050
C917	87-010-970-090		CAP,CER 4700P-2K K B DE
C951	87-010-381-080		CAP,E 330-16 M SME
C953	87-018-119-080		CAP,TC U 100P-50 K B UP050
C954	87-010-405-080		CAP,E 10-50 M 11L SME
C955	87-010-405-080		CAP,E 10-50 M 11L SME
C956	87-010-405-080		CAP,E 10-50 M 11L SME
C957	87-018-122-080		CAP,TC U 180P-50 K B UP050
C958	87-018-119-080		CAP,TC U 100P-50 K B UP050
C959	87-A10-050-010		CAP,CER 4700P-500 K
C960	87-010-221-080		CAP,E 470-10 M SME
C961	87-A12-168-080		CAP,E 33-160 M SMG
C962	87-A12-010-080		CAP,M/P 0.047-250 J ECQE2
C963	87-A10-283-080		CAP,M 1000P-50 J
C964	87-A10-283-080		CAP,M 1000P-50 J
C965	87-010-963-080		CAP,E 2.2-160 M 11L SME
C966	87-A12-014-080		CAP,M/P 0.1-250 J ECQE2
C967	87-A10-303-080		CAP,M 0.047-50 J
C968	87-010-221-080		CAP,E 470-10 M SME
CN901	87-009-034-010		CONN,6P V WHT PH
CN902	87-009-195-010		CONN,5P V WHT EH
CN903	87-A61-126-080		MALE, 1P TP42097
CN904	87-A61-060-080		CONN,1P V RED TP00706
CN951	87-009-030-010		CONN,2P V WHT PH
CN952	8A-JE7-620-010		CONN ASSY,2P VM-NK
CN952	87-099-043-010		CONN,2P V WHT EH
L901	87-005-608-080		COIL,33UH J LAV35
L902	87-005-608-080		COIL,33UH J LAV35
L903	87-005-608-080		COIL,33UH J LAV35
L951	87-005-482-080		COIL,56UH J FLR50
L952	87-005-481-080		COIL,47UH J FLR50
R901	87-A00-242-090		RES,M/F 8.2K-3W J RSF(S)
R902	87-A00-242-090		RES,M/F 8.2K-3W J RSF(S)
R903	87-A00-242-090		RES,M/F 8.2K-3W J RSF(S)
R968	87-022-382-090		RES,M/F 120-2W J
R969	87-A00-638-080		RES,M/F 47-1/2W J SPR
R970	87-A00-634-080		RES,M/F 2.7-1/4W J SPR
R971	87-A00-636-080		RES,M/F 560-1/4W J SPR
R973	87-A00-637-080		RES,M/F 1K-1/4W J SPR
R974	87-022-556-090		RES,M/F 180-3W J
R976	87-A00-636-080		RES,M/F 560-1/4W J SPR
R977	87-A00-634-080		RES,M/F 2.7-1/4W J SPR
R978	87-A00-635-080		RES,M/F 47-1/4W J SPR
SO901	8A-JE7-670-010		SOCKET,CRT 11P HPS1521-013411

S-JK C.B

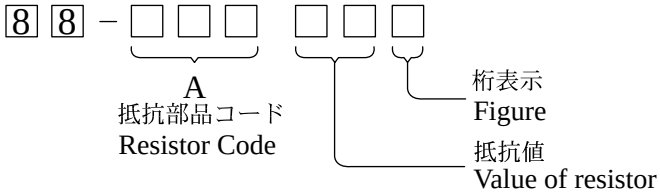
C771	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C772	87-010-197-080		C-CAP,S 0.01-25 K B C2012
CN771	87-009-345-010		CONN,2P H WHT PH
CNA771	8Z-JE5-631-010		CONN ASSY,5P S-JK
J771	87-A61-174-010		JACK,Y/CYKF51-5558

PS C.B

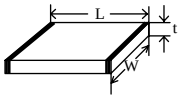
⚠	!C881	87-A10-688-090	CAP,M/P 0.22-275 K (B81133)
⚠	!C883	87-A10-688-090	CAP,M/P 0.22-275 K (B81133)
	C887	87-010-388-080	CAP,E 1000-25 M SME
	CN881	87-A61-299-010	CONN,4P B 5-VB
⚠	CN882	87-099-674-010	CONN,2P V VA
	CN883	87-A61-126-080	MALE, 1P TP42097
	CN884	87-A60-937-010	CONN,2P V VH
	CN885	87-A61-126-080	MALE, 1P TP42097
⚠	F881	87-A91-106-010	FUSE,5A 125V T SER233
⚠	FC881	87-033-213-080	FUSE CLAMP,PFC5000
⚠	FC882	87-033-213-080	FUSE CLAMP,PFC5000
⚠	LF881	87-A91-453-010	FLTR,LINE PLH10A7003R6P02B1
⚠	LF882	87-A91-626-010	FLTR,LINE ELF21V018A
⚠	PT881	8Z-JBH-614-010	PT,US TP8155T
	R881	87-023-102-080	RES,SD 4.7M-1/2W K

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

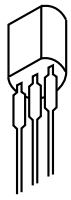
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



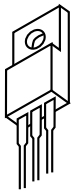
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code ：A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

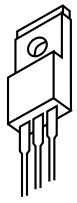
TRANSISTOR ILLUSTRATION



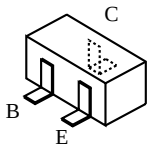
2SA1091-O
2SC1815
2SC2482



2SC5147D

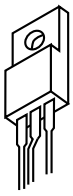


2SA1837
2SC4793
2SD2531

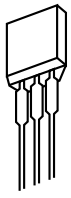


2SA1037
2SC2412K
KRC104S

2SA1015Y



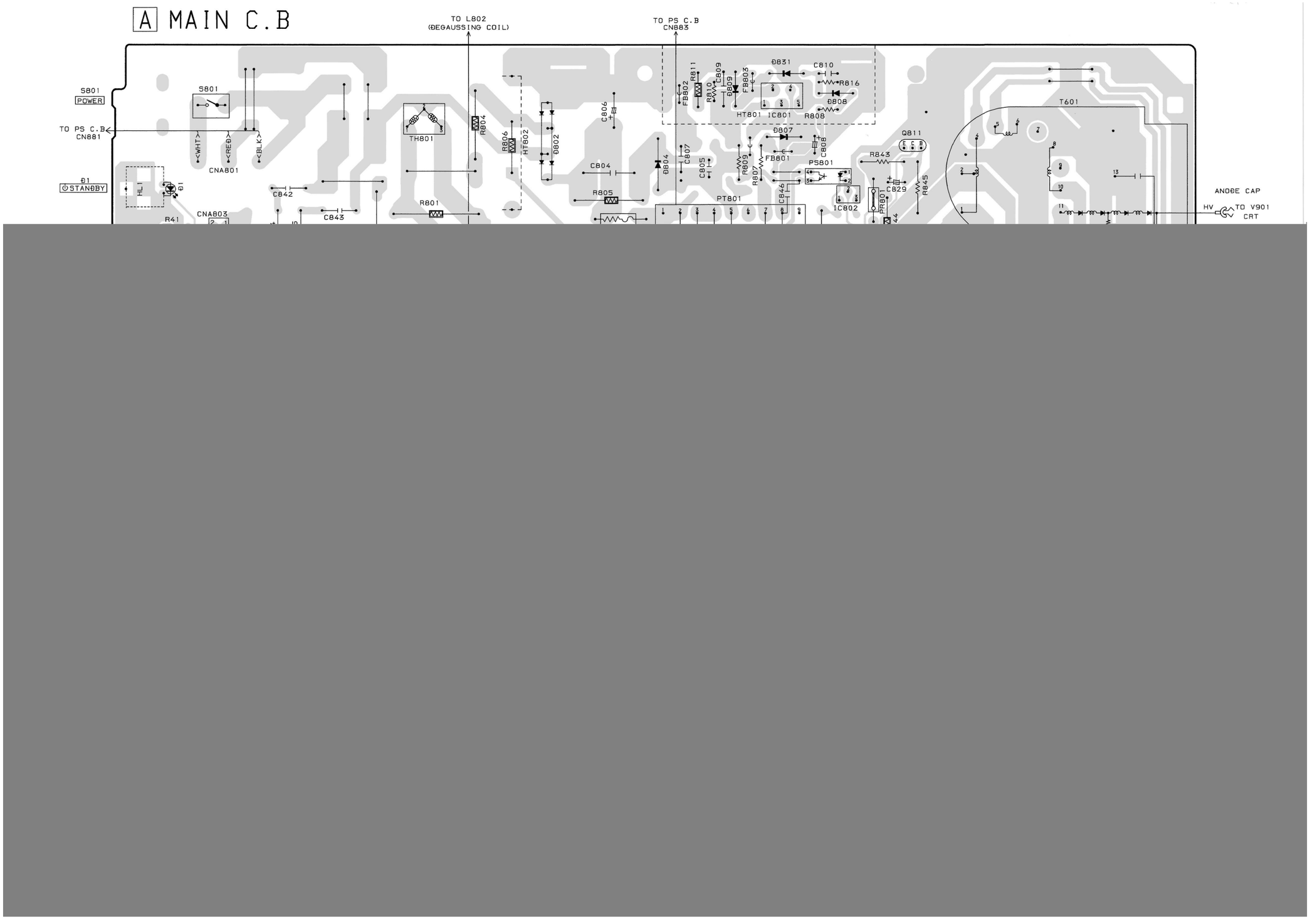
2SD2580



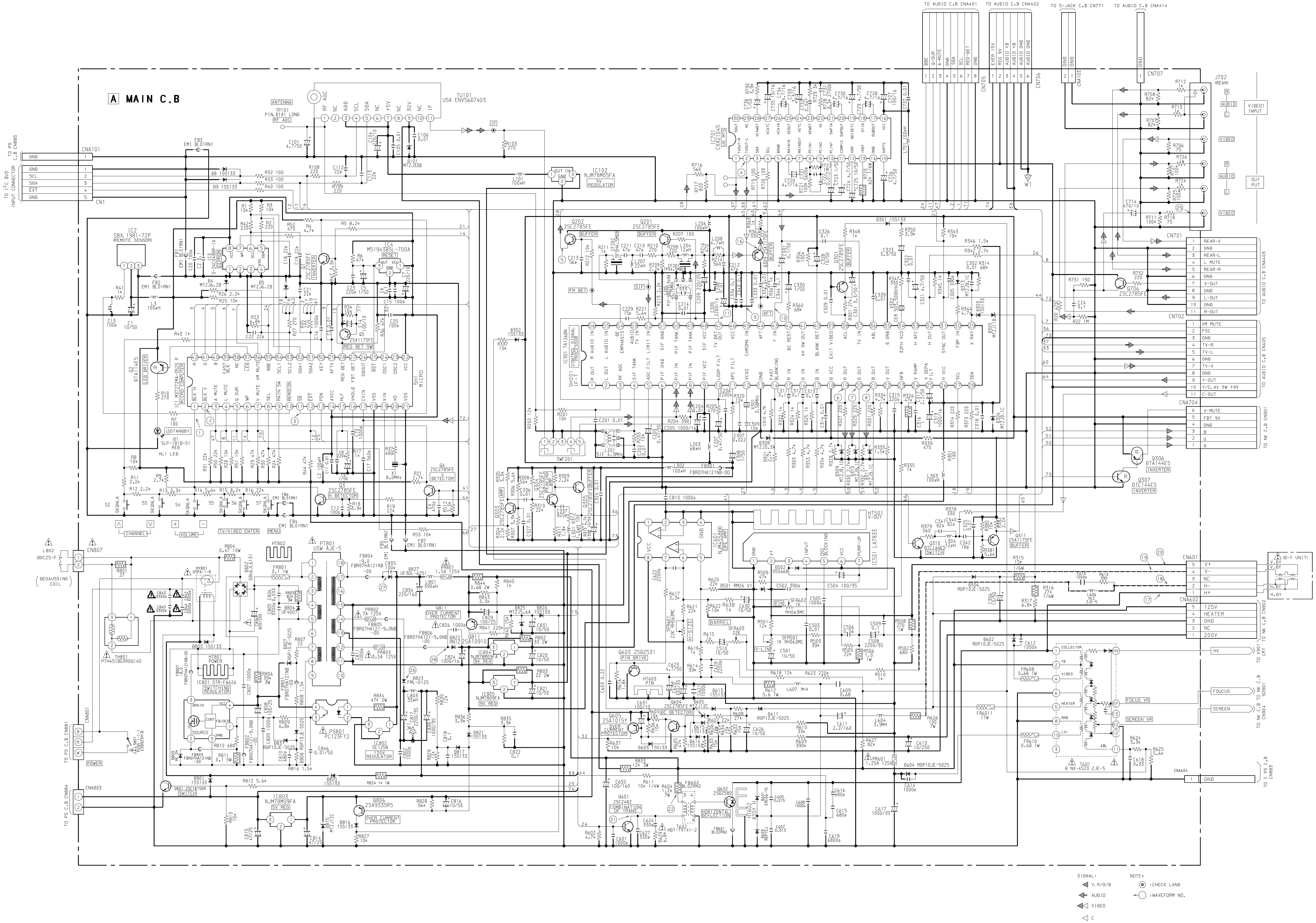
2SA933S 2SD774
2SA1175FE DTA114ES
2SC1740SRS DTA144ES
2SC2785FE DTC144ES

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

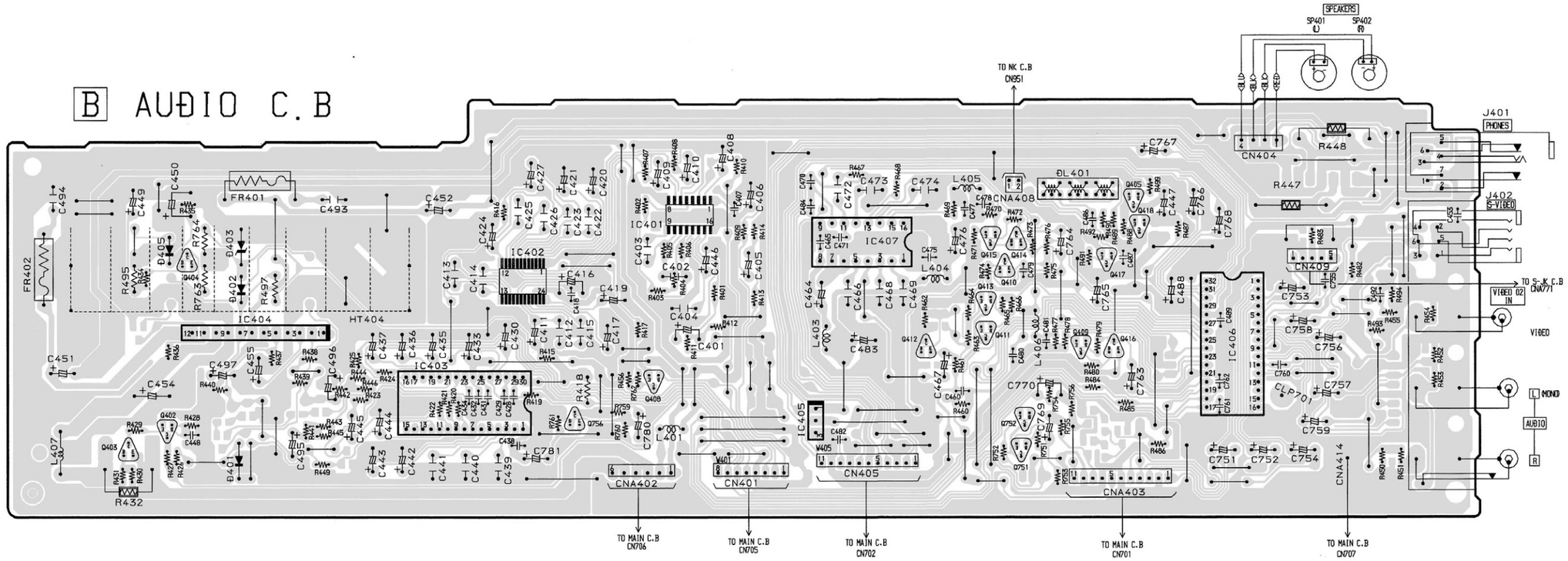


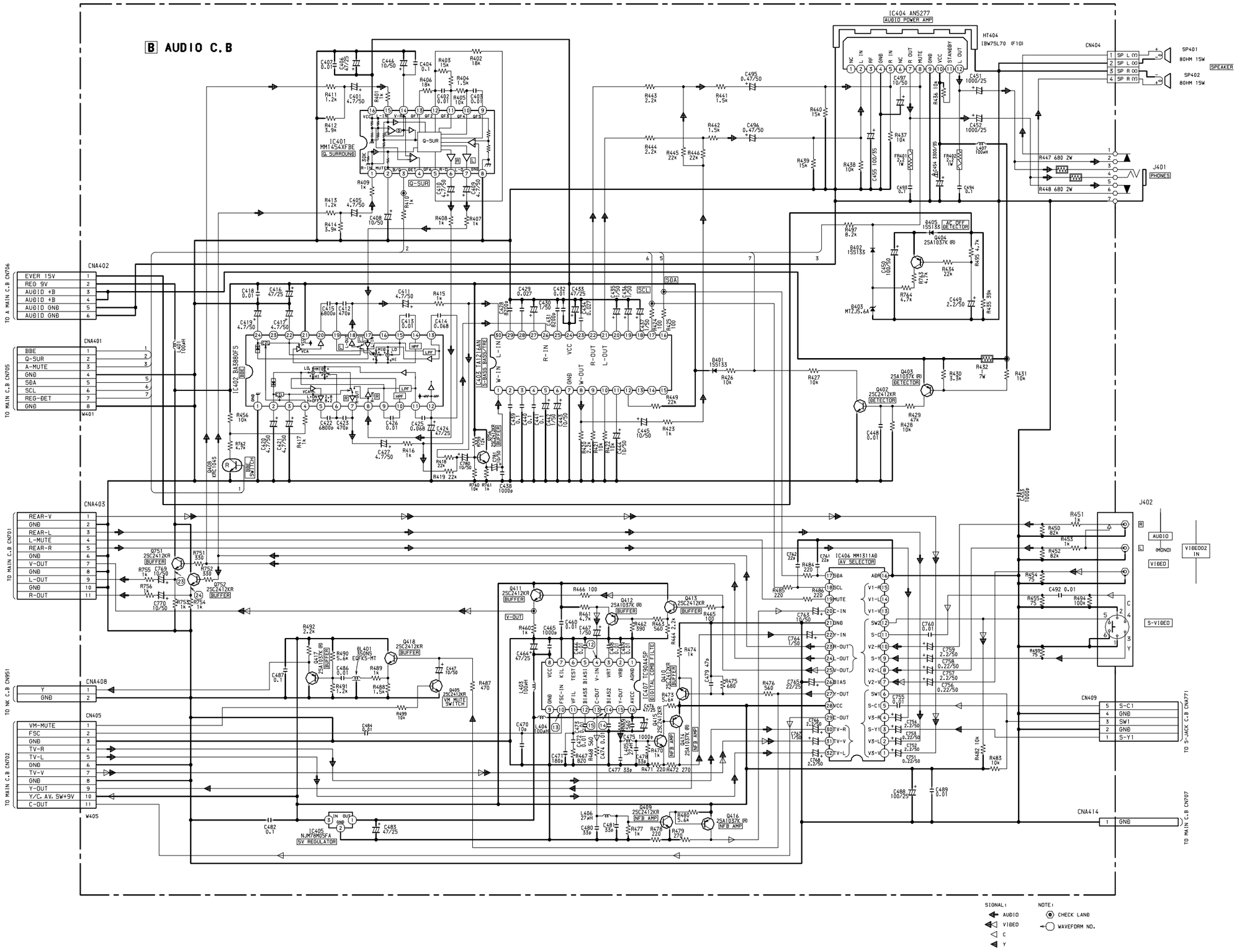
SCHEMATIC DIAGRAM – 1 (MAIN)


A MAIN C.B
TO PS C.B CN885
TO I²C BUS INPUT CONNECTOR
CNA101
CN1
GND
SCL
SDA
EXT
ANTENNA
TP101 PIN, DIA1 LONG
RF AGC
TU101 USA ENV56D74G3
IC102 NJM78M05FA
5V REGULATOR
IC2 SBX 1981-72P (REMOTE SENSOR)
IC3 S-24C04BDP-1A EEPROM
IC4 M51943BSL-700A RESET
IC1 M37272MA-052S P MICRO COMPUTER
Q1 2SC2785FE INVERTER
Q2 DTA114ES LED DRIVER
Q3 2SC2785FE H DETECTOR
Q4 2SC2785FE V DETECTOR
Q5 2SA1175FE REG DET SW
D1 SLP-181B-51 RED
HL1 LED
STANDBY
CHANNEL
VOLUME
TV/VIDEO ENTER
MENU
IC301 TA1268N CONTROL SIGNAL PROCESSOR
SH201 IF-T
SWF201
Q201 2SC2785FE BUFFER
Q202 2SC2785FE BUFFER
Q301 2SC2785FE BUFFER
Q309 2SA1175FE BUFFER
FM DET
SIF
AFT
IC701 CXA2104S US MTS
TO AUDIO C.B CNA401
TO AUDIO C.B CNA402
TO S-JACK C.B CN771
TO AUDIO C.B CNA414
CN705
CN706
CNA103
CN707
J702 (REAR)
VIDEO1 INPUT
OUT PUT
CN701
TO AUDIO C.B CNA403
CN702
TO AUDIO C.B CN405
CNA704
TO NK C.B CN901
Q706 2SC2785FE
Q306 DTA144ES INVERTER
Q307 DTC144ES INVERTER
L802 DGC25-F
(DEGAUSSING COIL)
CN807
TH801 PTH451BG3R0Q140
RY801 G5PA-1-B
D802 GBU6JL6131
PT801 USW AJE-5
HT802
HT801 POWER
IC801 STR-F6626 SWITCHING REGULATOR
PS801 PC123FY2
IC802 SE125N 120V REGULATOR
Q811 OVER CURRENT PROTECTOR
IC804 NJM78M09FA 9V REG
IC805 NJM7809FA 9V REG
IC803 NJM78M09FA 5V REG
Q806 2SA933SRS OVER CURRENT PROTECTOR
Q801 2SC1815GR SWITCH
CNA801
TO PS C.B CN881
S801 PUSH 1-1-1 ESB925H1B
POWER
CNA803
TO PS C.B CN884
Q303 2SC2785FE AMP
Q304 2SC2785FE PEAKING AMP
Q305 2SC2785FE BUFFER
IC601 NJM4558DD OPE AMP
HT501 V-OUT
IC501 LA7833
Q310 DTC144ES SWITCH
Q311 2SA1175FE BUFFER
Q603 2SD2531 PIN DRIVE
HT603 PIN
Q604 2SC2785FE DC DETECTOR
Q605 2SA1015Y OVER CURRENT PROTECTOR
Q601 2SC2482 COMBINATION OF TRANS
Q602 2SD2580 HORIZONTAL DEFLECTION
T602 HDT-TVT41-2
HT602 ASSY H
PIN
BARREL
H-SIZE
V-LIN
CN601
(D-Y UNIT)
V.DY
H.DY
CNA602
TO NK C.B CN902
125V
HEATER
200V
T601 D NX-4523 ZJE-5
HV
TO V901 CRT
FOUCUS
SCREEN
FOCUS VR
SCREEN VR
TO NK C.B S0901
TO NK C.B CN904
CNA604
TO C PS C.B CN883
SIGNAL:
Y, R/G/B
AUDIO
VIDEO
C
NOTE:
:CHECK LAND
:WAVEFORM NO.

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

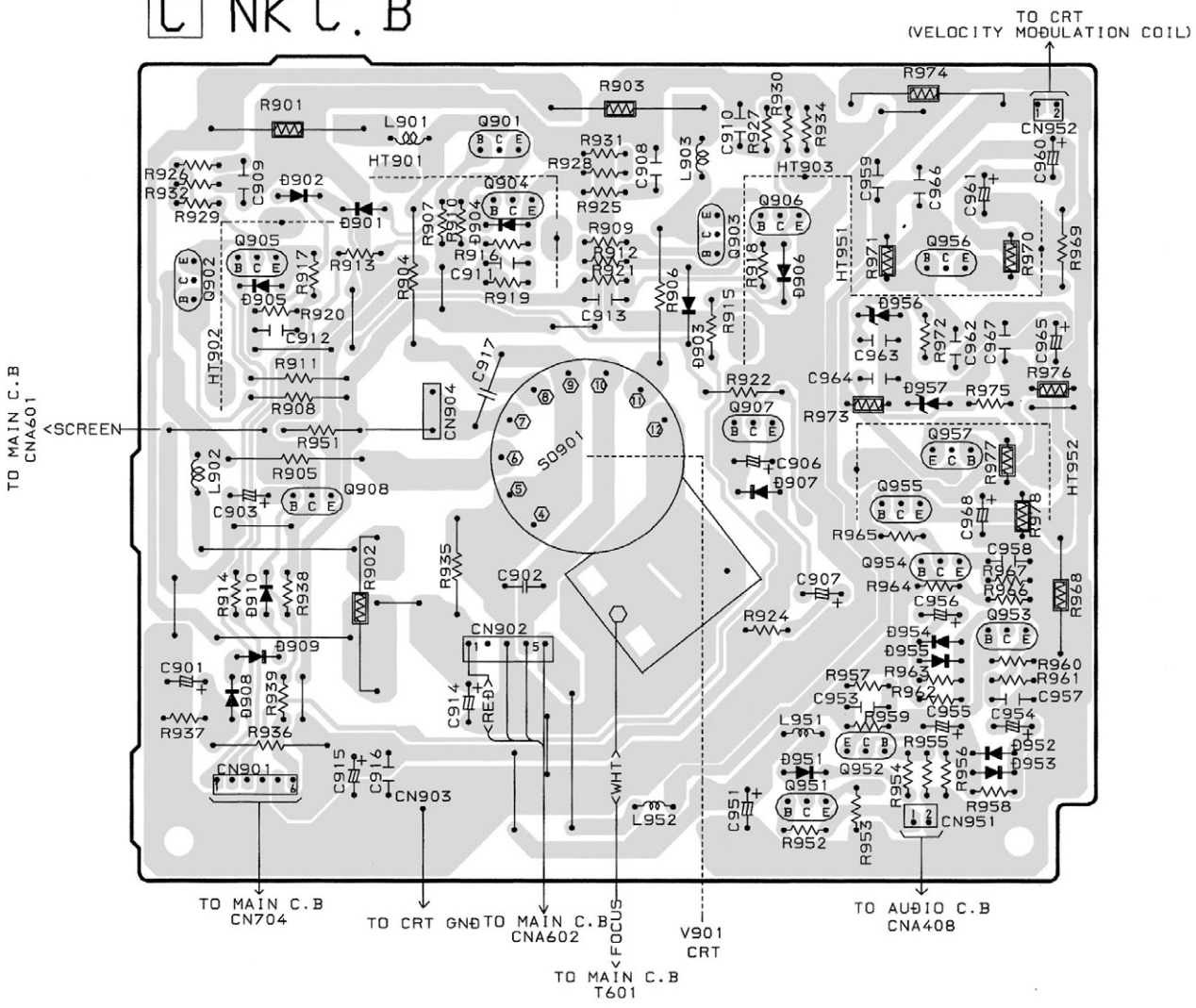



B AUDIO C.B
IC401 MM1454XFBE G. SURROUND
Q-SUR
IC402 BA3880FS
IC404 AN5277 AUDIO POWER AMP
HT404 1BW75L70 (F10)
IC406 MM1311AB AV SELECTOR
IC407 TC90A45P DIGITAL COMB FILTER
IC405 NJM78M05FA 5V REGULATOR
CN404
SP401 80HM 15W
SP402 80HM 15W
SPEAKER
J401 PHONES
J402
AUDIO (MONO)
VIDEO
VIDEO2 IN
S-VIDEO
CN409
CN414
CNA402
CNA401
CNA403
CNA408
CNA405
TO A MAIN C.B CN706
TO MAIN C.B CN705
TO MAIN C.B CN701
TO NK C.B CN951
TO MAIN C.B CN702
TO S-JACK C.B CNA771
TO MAIN C.B CN707
W401
W405
BUFFER
NFB AMP
DETECTOR
AV DET DETECTOR
VM MUTE SWITCH
SIGNAL: AUDIO VIDEO C Y
NOTE: CHECK LAND WAVEFORM NO.

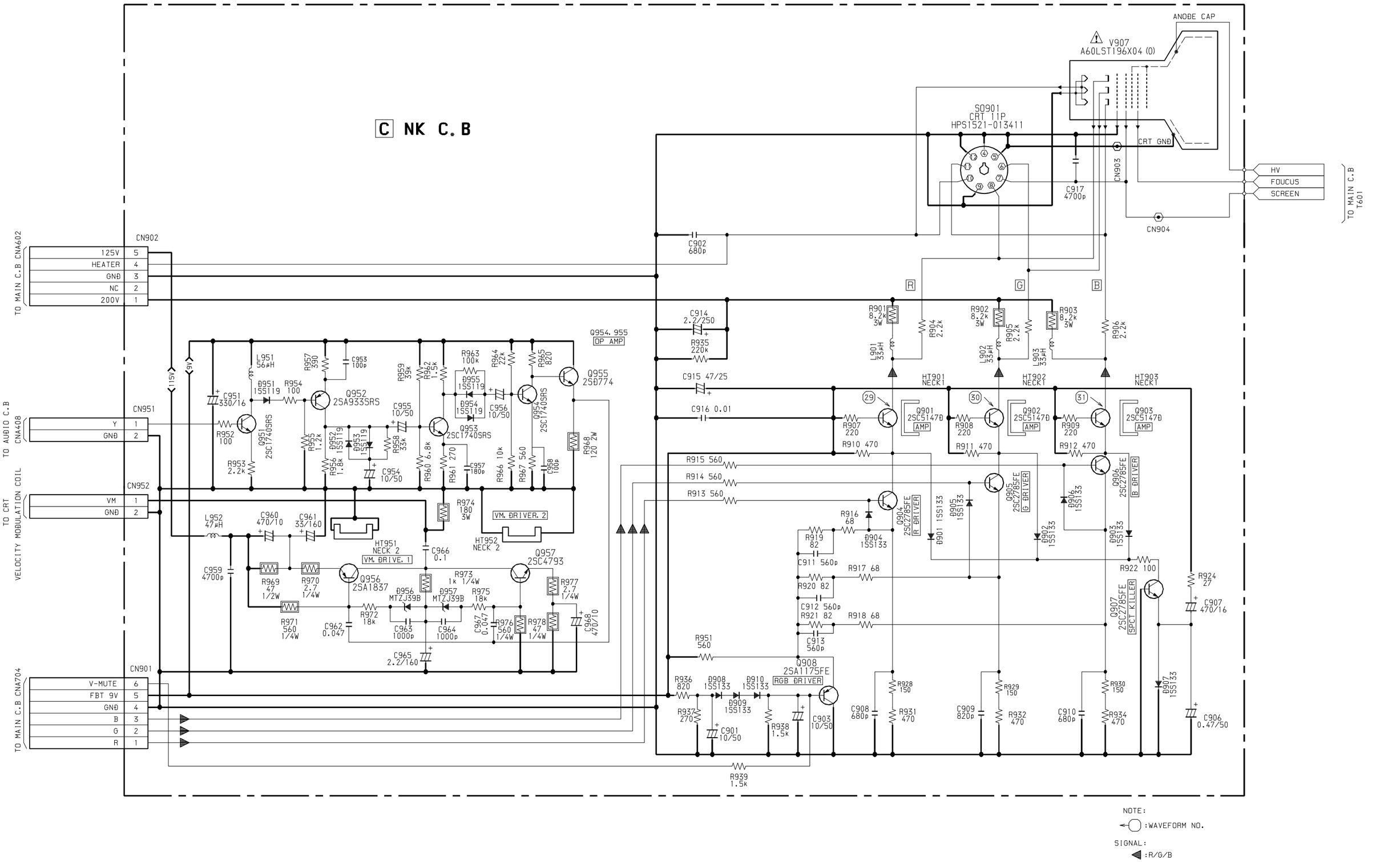
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

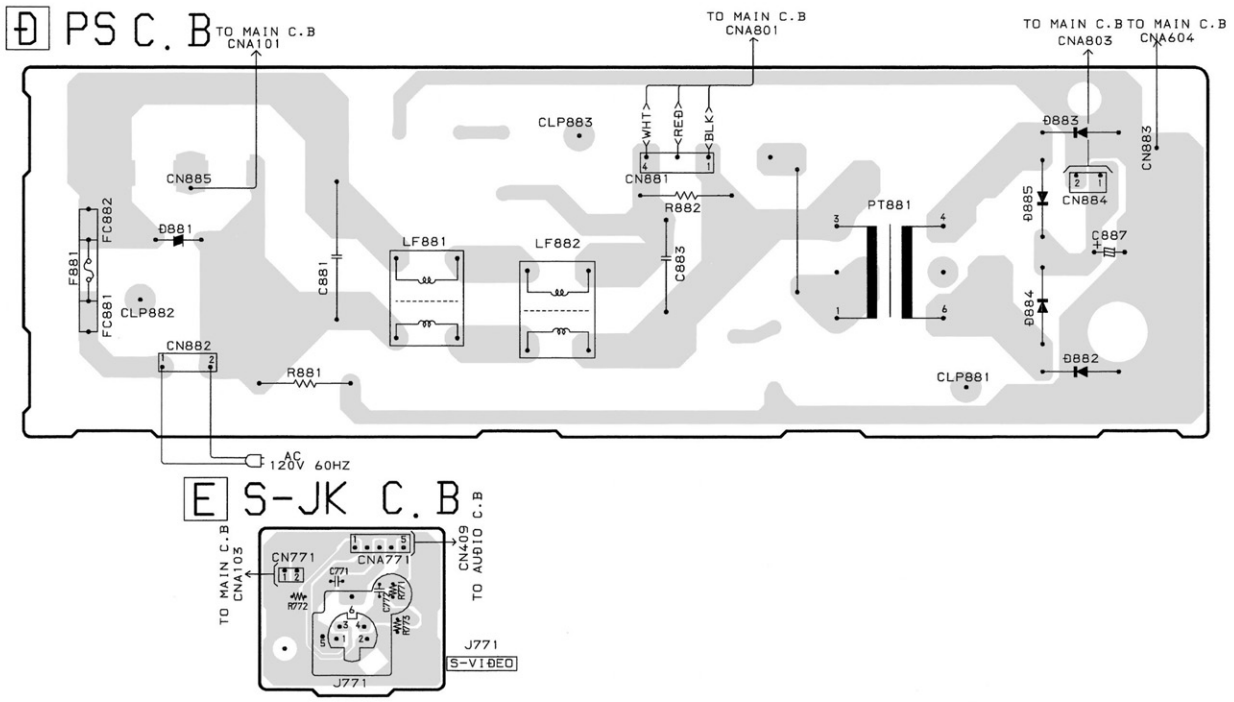
A B C D E F G H I J K L M N O P Q R S T U

C NK C.B

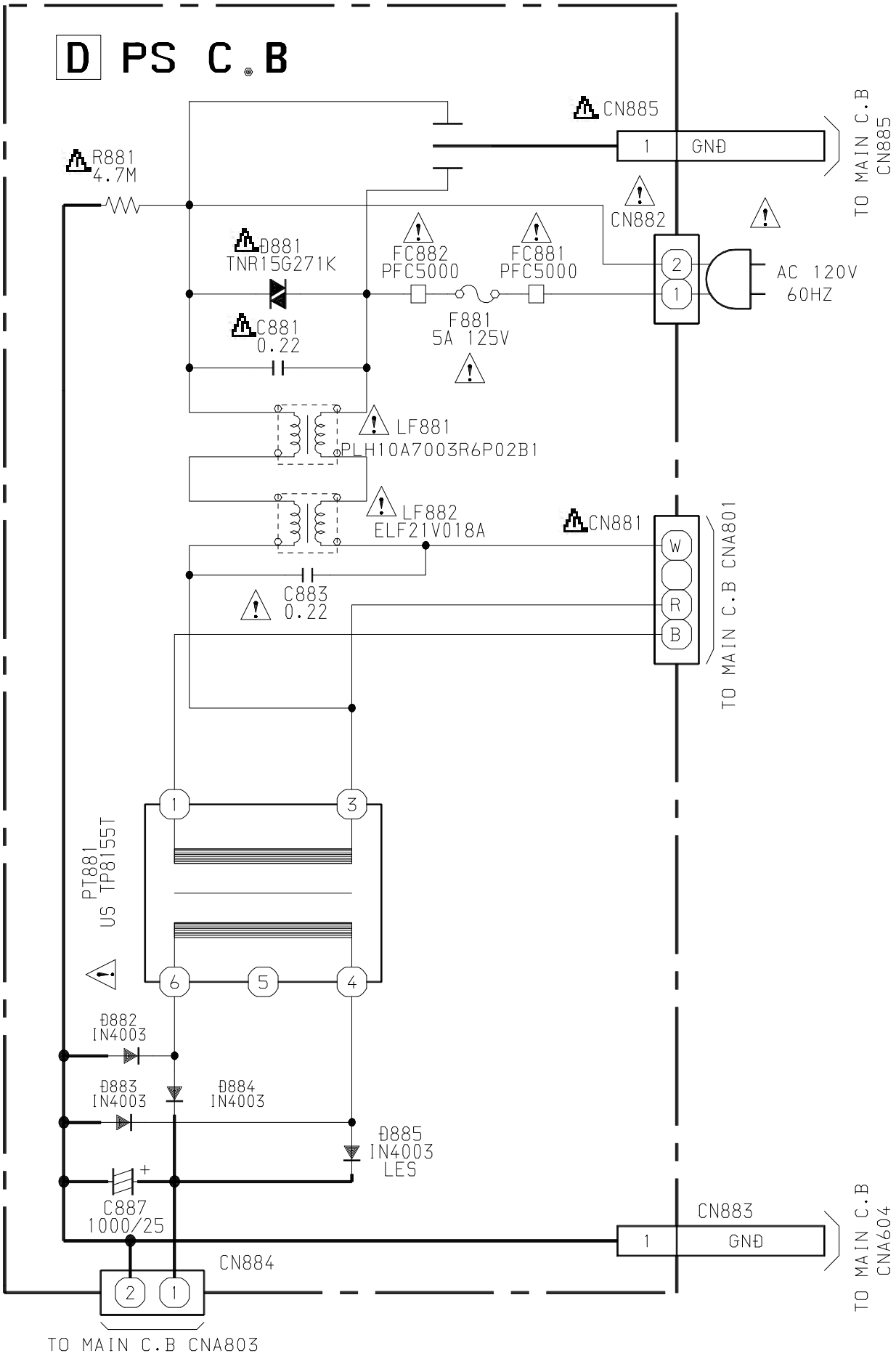


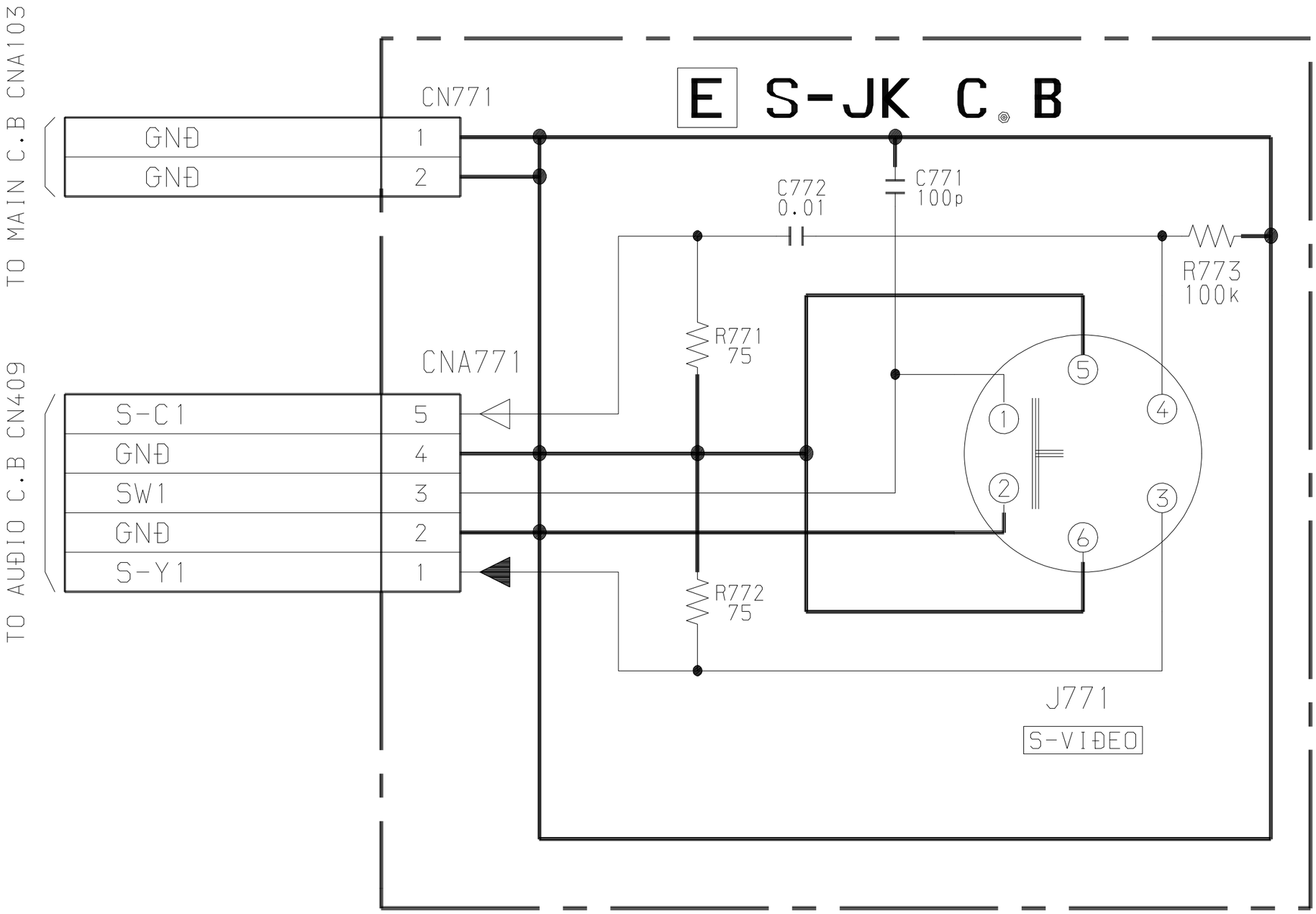
SCHEMATIC DIAGRAM – 3 (NK)




Đ PS C. B
TO MAIN C.B CNA101
TO MAIN C.B CNA801
TO MAIN C.B CNA803
TO MAIN C.B CNA604
CLP883
WHT
RED
BLK
CN881
R882
CN885
CN883
Đ883
CN884
Đ885
C887
Đ884
Đ882
PT881
CLP881
FC882
F881
FC881
Đ881
CLP882
CN882
R881
C881
LF881
LF882
C883
AC 120V 60HZ
E S-JK C. B
TO MAIN C.B CNA103
CN771
CNA771
CN409
TO AUDIO C.B
J771
S-VIĐEO

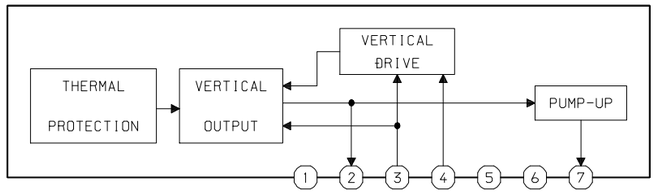
SCHEMATIC DIAGRAM – 3 (PS)



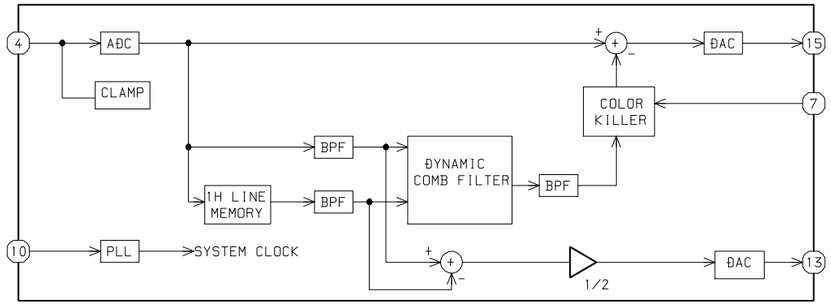

E S-JK C.B
CN771
GND 1
GND 2
TO MAIN C.B CNA103
CNA771
S-C1 5
GND 4
SW1 3
GND 2
S-Y1 1
TO AUDIO C.B CN409
C772
0.01
C771
100p
R773
100k
R771
75
R772
75
J771
S-VIDEO

IC BLOCK DIAGRAM

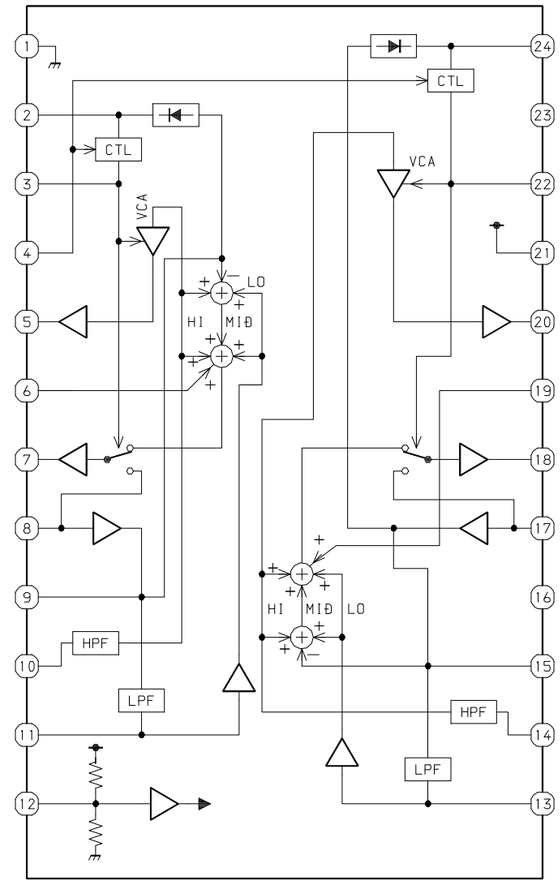
IC, LA7833



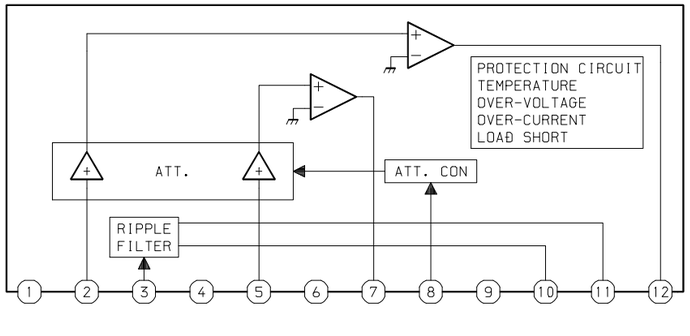
IC, TC90A45P



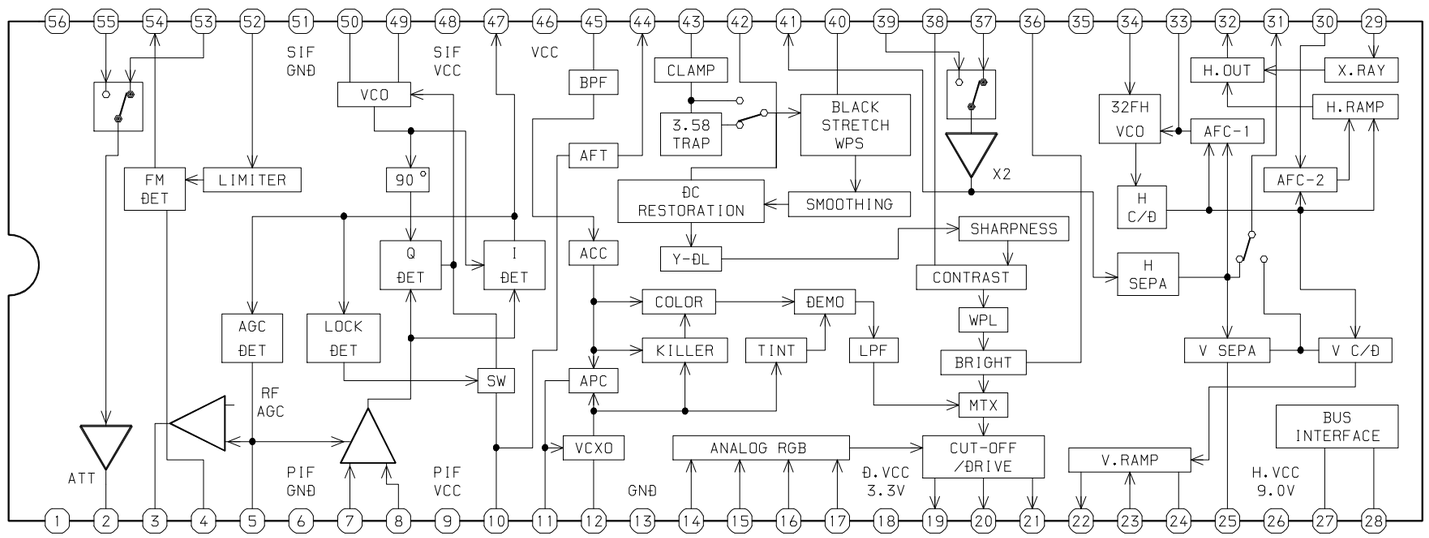
IC, BA3880FS



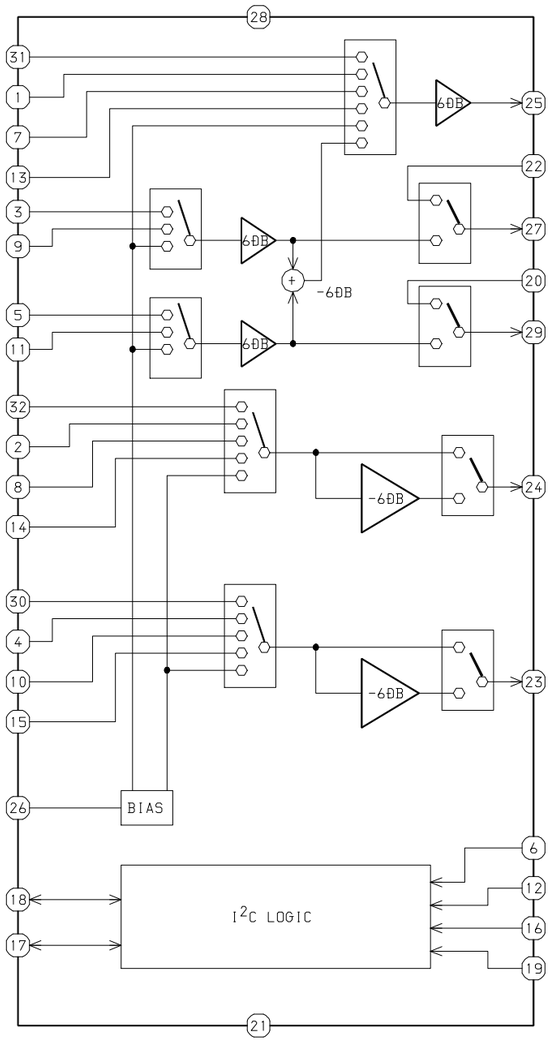
IC, AN5277



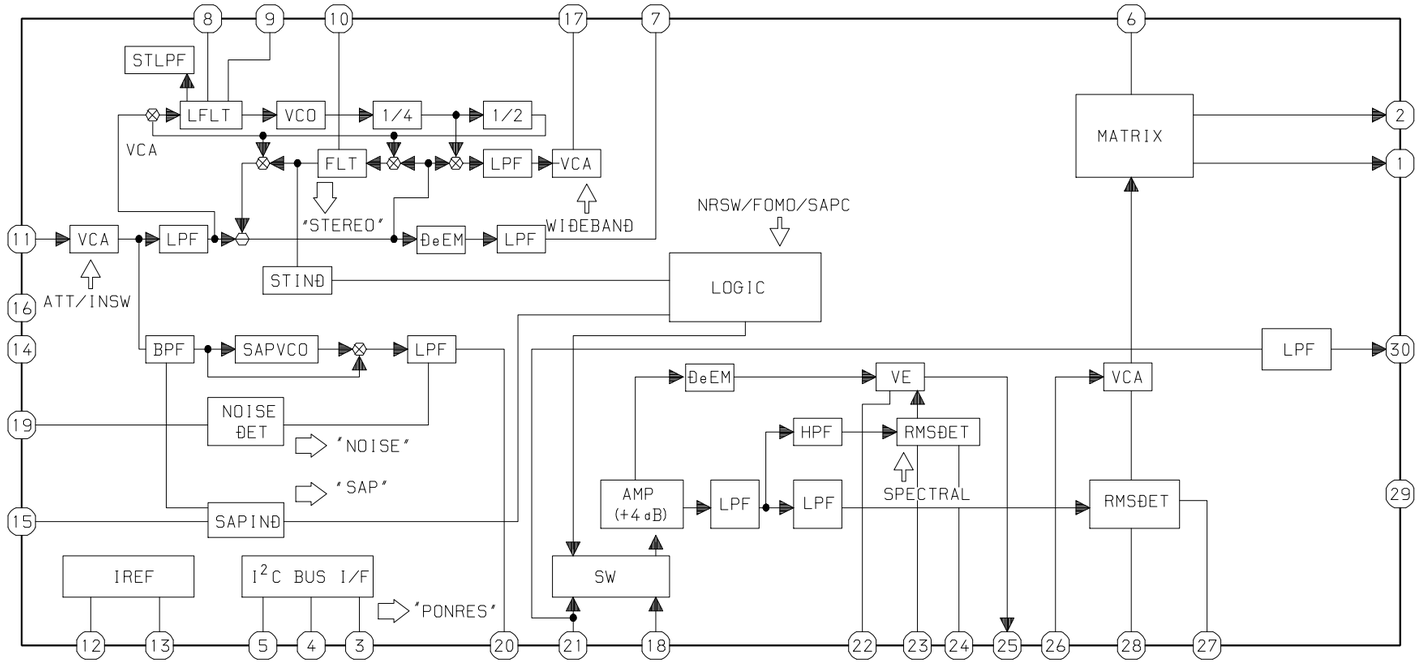
IC, TA1268N



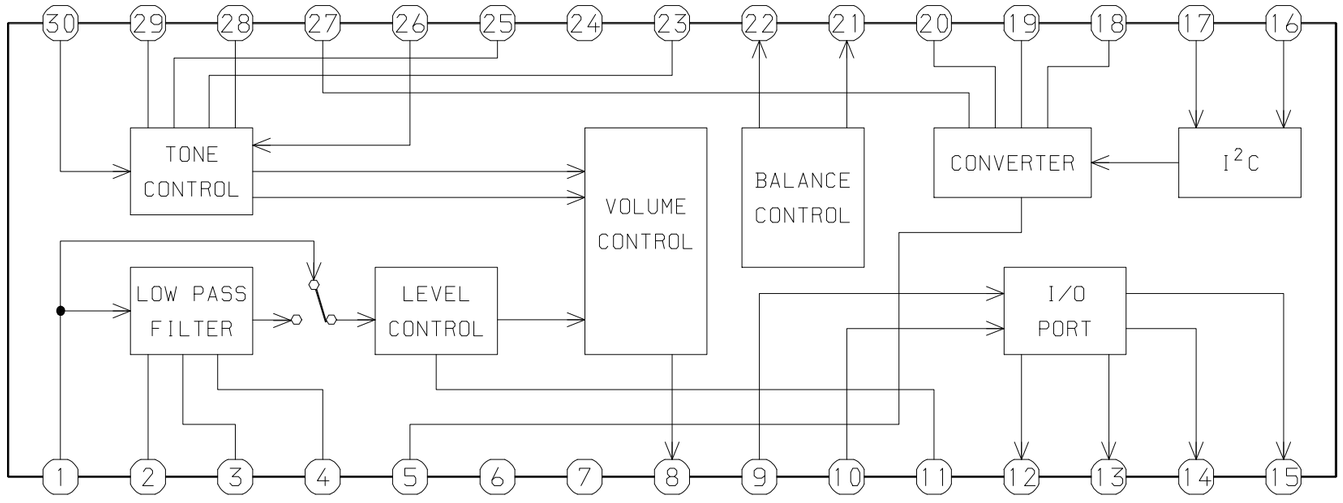
IC, MM1311AÐ



IC, CXA2104S



IC, TA1216AN



IC DESCRIPTION

IC, M37272MA-0525SP

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{BLK H}}$	I	Blanking H sync input.
2	$\overline{\text{BLK V}}$	I	Blanking V sync input.
3	A MUTE	O	Audio Amp mute.
4	L MUTE	O	Audio mute.
5	Q SUR	O	Q surround switch.
6	WP	O	EEPROM Write protect.
7	V MUTE	O	Video mute
8	SEL	O	BPF switch.
9	$\overline{\text{MAIN SW}}$	–	Not used.
10	$\overline{\text{REMOCON}}$	I	Remote control signal input.
11	$\overline{\text{SD}}$	I	Pluse check.
12	$\overline{\text{EXT}}$	I	I^2C switch.
13	PON	O	Power switch.
14	AVCC	–	VCC.
15	HLF	–	Filter Connection Terminal.
16	VHOLD	–	Condenser Connection Terminal.
17	CV IN	I	Complex video signal input
18	VSS	–	GND.
19	XIN	I	Main Clock (8 MHz).
20	XO	O	Main Clock (8 MHz).
21	VSS	–	GND.
22	VCC	–	VCC.
23	OSC2	–	Not used.
24	OSC1	–	Not used.
25	$\overline{\text{RST}}$	I	Reset input.
26	SDOUT	O	Not used.
27	FBT DET	O	FBT detection (over 2.5V).
28	REG DET	I	REG detection (over 2.5V).
29	AFTV	I	AFT voltage input.
30	KEY	I	Key input.
31	SDA2	I	I^2C bus CH2 data (Reg IC).
32	SDA1	I	I^2C bus CH1 data (EEPROM).
33	SCL2	I	I^2C bus CH2 data (Reg IC).
34	SCL1	I	I^2C bus CH1 data (EEPROM).
35	BBE	O	BBE switch.
36	VM MUTE	O	VM mute.
37	$\overline{\text{LED}}$	O	Power LED switch.
38	NC	–	Not connected.
39	FAST BLK	O	OSD Blanking.
40	B	O	OSD B output.
41	G	O	OSD G output.
42	R	O	OSD R output.

VOLTAGE CHART
(POWER ON, COLOR BAR, VOLUME 10)

REF NO.	E	C	B
Q1	0	4.61	0.310

REF NO.	E	C	B
Q2	5.11	-0.42	5.05

REF NO.	E	C	B
Q3	0	4.22	0.042

REF NO.	E	C	B
Q4	0	4.83	0.12

REF NO.	E	C	B
Q5	5.06	0	5.06

REF NO.	E	C	B
Q201	4.48	8.93	5.12

REF NO.	E	C	B
Q202	2.742	8.93	3.327

REF NO.	S	D	G
Q301	-0.342	2.484	0

REF NO.	S	D	G
Q303	2.725	4.88	3.725

REF NO.	E	C	B
Q304	1.871	6.71	2.465

REF NO.	S	D	G
Q305	6.1	9	6.7

REF NO.	E	C	B
Q306	9.01	0.625	8.93

REF NO.	E	C	B
Q307	0	8.93	0.014

REF NO.	E	C	B
Q309	3.668	0	3.042

REF NO.	E	C	B
Q310	0	0.65	0.012

REF NO.	E	C	B
Q311	3.92	0	3.304

REF NO.	E	C	B
Q402	0	5.05	0

REF NO.	E	C	B
Q403	29.78	0	29.76

REF NO.	E	C	B
Q404	12.48	0.088	12.59

REF NO.	E	C	B
Q405	0	0	0.009

REF NO.	E	C	B
Q408	0	8.61	0.008

REF NO.	E	C	B
Q409	1.418	8.22	1.977

REF NO.	E	C	B
Q410	1.654	8.86	2.270

REF NO.	E	C	B
Q411	4.46	8.86	5.11

REF NO.	E	C	B
Q412	2.435	0	1.820

REF NO.	E	C	B
Q413	4.46	8.86	5.10

REF NO.	E	C	B
Q414	8.86	2.897	8.22

REF NO.	E	C	B
Q415	1.32	8.23	1.875

REF NO.	E	C	B
Q416	8.86	3.11	8.22

REF NO.	E	C	B
Q417	2.2535	0	1.896

REF NO.	E	C	B
Q418	3.562	8.86	4.2

REF NO.	E	C	B
Q601	0.004	101.1	0.33

REF NO.	E	C	B
Q602	0.013	120.2	-0.121

REF NO.	E	C	B
Q603	0.003	15.46	0.552

REF NO.	E	C	B
Q604	0	5.11	0

REF NO.	E	C	B
Q605	5.11	0	5.11

REF NO.	E	C	B
Q706	3.807	8.86	4.45

REF NO.	E	C	B
Q751	3.424	8.61	4.059

REF NO.	E	C	B
Q752	3.421	8.62	4.056

REF NO.	E	C	B
Q756	3.358	8.62	3.887

REF NO.	E	C	B
Q801	0	0.082	0.751

REF NO.	E	C	B
Q806	5.11	-0.82	5.09

REF NO.	E	C	B
Q811	123.7	-0.012	123.4

REF NO.	E	C	B
Q901	8.52	142.6	8.98

REF NO.	E	C	B
Q902	8.51	139.7	8.98

REF NO.	E	C	B
Q903	8.51	138.1	8.98

REF NO.	E	C	B
Q904	2.076	8.52	2.44

REF NO.	E	C	B
Q905	2.098	8.51	2.467

REF NO.	E	C	B
Q906	2.142	8.51	2.490

REF NO.	E	C	B
Q907	0.157	8.64	0

REF NO.	E	C	B
Q908	1.316	0	0.609

REF NO.	E	C	B
Q951	1.920	9.01	2.545

REF NO.	E	C	B
Q952	7.68	3.219	8.31

REF NO.	E	C	B
Q953	0.63	5.53	1.273

REF NO.	E	C	B
Q954	2.060	5.96	2.709

REF NO.	E	C	B
Q955	5.34	9.01	5.95

REF NO.	E	C	B
Q956	123	61.8	122.5

REF NO.	E	C	B
Q957	0.188	61.8	0.743

IC1, M37272MA-052SP

PIN NO.	VOLT (V)
1	4.22
2	4.83
3	0.022
4	0.02
5	0.029
6	5.11
7	0.015
8	0.014
9,10	5.09
11	4.61
12	5.09
13	5.01
14	5.06
15	1.978
16	0.336
17	2.328
18	0
19	2.288
20	2.339
21	0
22	5.06
23	5.04
24	5.06
25	5.04
26	5.06
27	0
28	2.481
29	2.48
30	5.11
31	3.83
32	5.06
33	4.15
34	5.06
35	0.009
36	0.01
37,38	5.05
39~42	0.011

IC2, SBX1981-72P

PIN NO.	VOLT (V)
1	5.09
2	5.11
3	0

IC3, S-24CO4BDP-1A

PIN NO.	VOLT (V)
1~4	0
5,6	5.05
7	5.11
8	5.06

IC4, M51943BSL-700A

PIN NO.	VOLT (V)
1	5.06
2	0
3	5.03

IC102, NJM78M05FA

PIN NO.	VOLT (V)
1	5.09
2	0
3	9.02

IC301, TA1268N

PIN NO.	VOLT (V)
1	0.025
2	3.946
3	0.002
4	3.257
5	0.696
6	0
7	1.99
8	1.989
9	8.97
10	4.45
11	6.35
12	4.83
13	0
14	0.008
15,16	4.86
17	4.83
18	3.195
19	2.406
20	2.441
21	2.459
22	0.754
23	4.99
24	5.09
25	6.6
26	9.05
27	4.1
28	3.83
29	2.626
30	1.331
31	1.145
32	1.246
33	7.61
34	6.61
35	0
36	3.112
37	3.263
38	3.993
39	1.812
40	5.22
41	4.07

PIN NO.	VOLT (V)
42	4.77
43	4.71
44	2.476
45	3.921
46	9.03
47	5.13
48	8.93
49,50	7.94
51,52	0
53	3.534
54	3.529
55	2.786
56	0

IC401, MM1454XFBE

PIN NO.	VOLT (V)
1	3.972
2	3.973
3	0.027
4	0.007
5	3.979
6,7	3.984
8	0
9,10	3.981
11	3.98
12,13	3.982
14	4.62
15	3.972
16	8.62

IC402, BA3880FS

PIN NO.	VOLT (V)
1	0
2	4.29
3	6.2
4	8.61
5~15	4.43
16	0
17~20	4.43
21	8.62
22	6.15
23	0
24	4.29

IC403, TA1216AN

PIN NO.	VOLT (V)
1	4.81
2	5.43
3	5.37
4	5.45
5	0.23
6	5.54
7	0
8	3.896
9,10	0.013
11	4.76
12	0.062
13	0.678
14	0.71
15	5.12
16	3.84
17	4.15
18	4.73
19	1.794
20	4.67
21,22	4.17
23	4.84
24	8.62
25	4.83
26	4.82
27	4.67
28	4.84
29	4.83
30	4.82

IC404, AN5277

PIN NO.	VOLT (V)
1~2	0
3	28.47
4~6	0
7	14.34
8	0.622
9	0
10	29.73
11	18.94
12	14.36

IC405, NJM78M05FA

PIN NO.	VOLT (V)
1	5.12
2	0
3	8.86

IC406, MM1311AD

PIN NO.	VOLT (V)
1	4.63
2	4.88
3	4.22
4	4.87
5	4.2
6	8
7	4.22
8	4.87
9	4.22
10	4.87
11	4.2
12	8
13	4.33
14,15	4.88
16	0
17	3.84
18	4.15
19	0.018
20	4.19
21	0
22	5.14
23	4.062
24	4.064
25	5.11
26	4.24
27	4.2
28	8.86
29	3.435
30	4.87
31	4.22
32	4.87

IC407, TC90A45P

PIN NO.	VOLT (V)
1	0
2	2.237
3	2.801
4	2.422
5	1.275
6,7	0
8	5.08
9	0
10	2.162
11	2.033
12	3.424
13	3.092
14	1.546
15	2.945
16	5

IC501, LA7833

PIN NO.	VOLT (V)
1	0
2	16.58
3	27.18
4	0.747
5	0.751
6	26.55
7	2.661

IC601, NJM4558DD

PIN NO.	VOLT (V)
1	26.13
2~4	0.005
5	5.15
6	5.16
7	4.82
8	26.55

IC701, CXA2104S

PIN NO.	VOLT (V)
1,2	4.065
3	3.83
4	4.1
5	0
6	4.051
7	3.877
8	4.046
9	3.837
10	5.15
11	4.045
12	1.254
13	1.254
14	0
15	4.31
16	8.77
17	4.048
18	4.057
19	3.95
20	4
21	4.05
22	3.94
23	4.051
24	1.745
25	4.064
26	4.052
27	1.703
28	3.903
29	-0.013
30	4

IC802, SE120N

PIN NO.	VOLT (V)
1	124.4
2	91.2
3	0

IC803, NJM78M05FA

PIN NO.	VOLT (V)
1	5.11
2	0
3	12.51

IC804, NJM78M09FA

PIN NO.	VOLT (V)
1	8.87
2	0
3	11.77

IC805, NJM7809FA

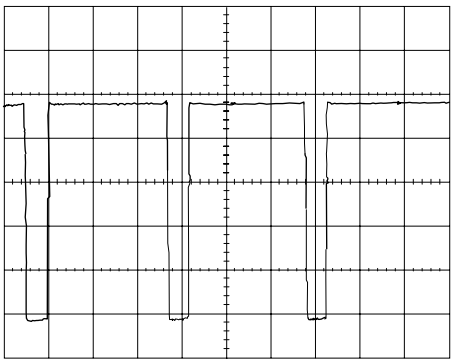
PIN NO.	VOLT (V)
1	9.04
2	0
3	11.77

TU101

PIN NO.	VOLT (V)
1	0
2	9.3
3	4.8
4	4.15
5	3.82
6	0
7	4.8
8	0
9	32.49
10,11	0

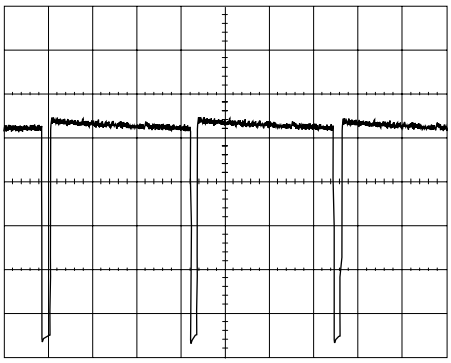
WAVEFORM

① IC1 PIN 1 ($\overline{\text{BLK H}}$)



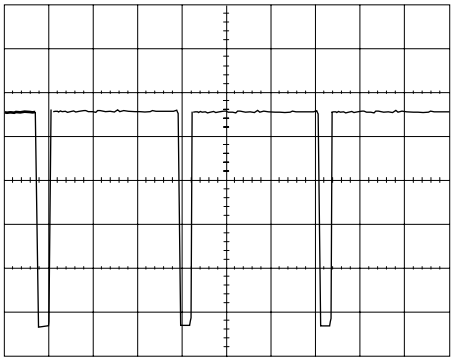
1 V/div
20 µs/div

② IC1 PIN 2 ($\overline{\text{BLK V}}$)



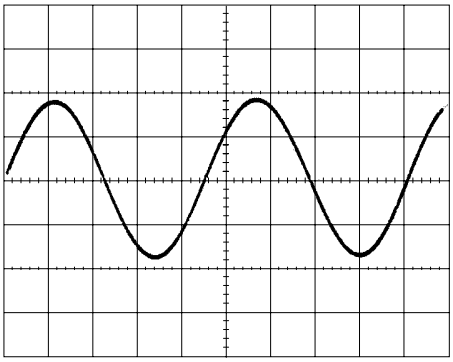
1 V/div
5 ms/div

③ IC1 PIN 11 ($\overline{\text{SD}}$)



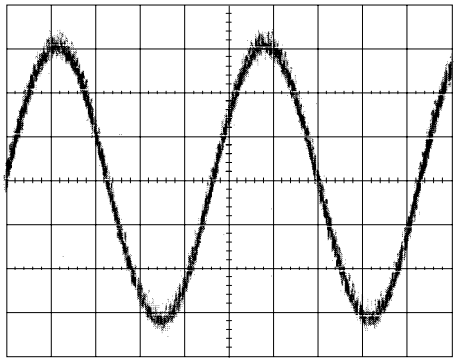
1 V/div
20 µs/div

④ IC701 PIN 2 (TVOUT-L)



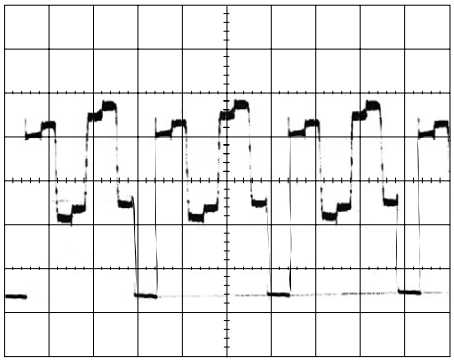
0.1 V/div
0.2 ms/div

⑤ Q202 EMITTER



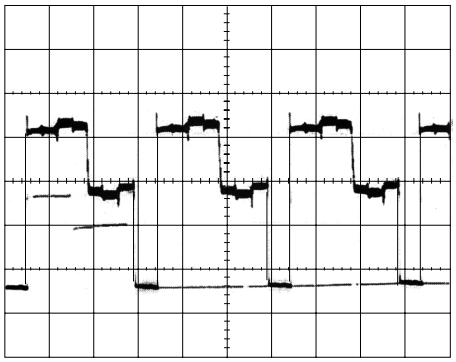
0.1 V/div
0.2 ms/div

⑥ IC301 PIN 19 (R OUT)



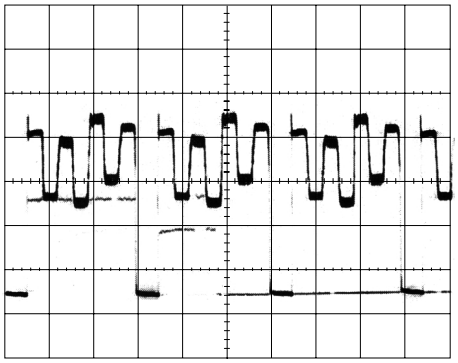
1 V/div
20 µs/div

⑦ IC301 PIN 20 (G OUT)



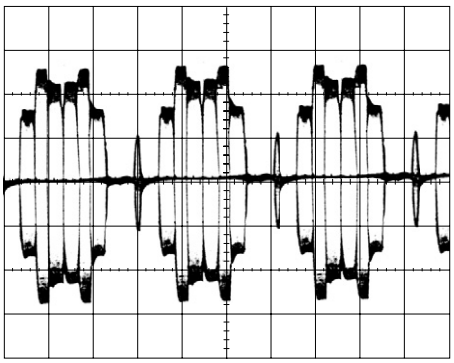
1 V/div
20 µs/div

⑧ IC301 PIN 21 (B OUT)



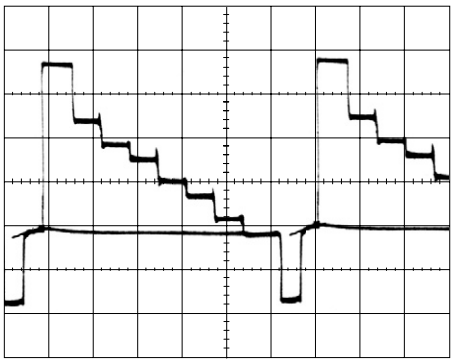
1 V/div
20 µs/div

⑨ IC301 PIN 45 (CHROMA IN)



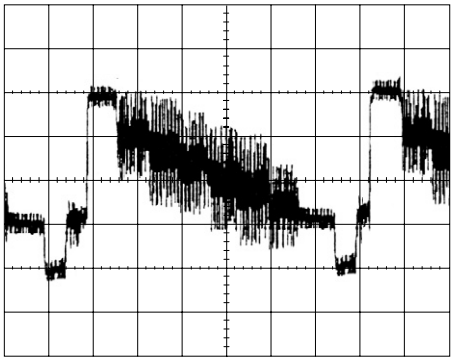
0.1 V/div
20 µs/div

⑩ IC301 PIN 43 (Y IN)



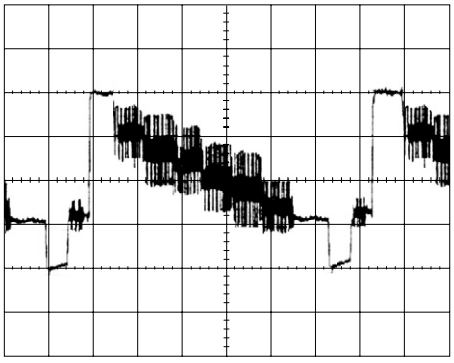
0.2 V/div
10 µs/div

⑪ IC301 PIN 47 (TV DET OUT)



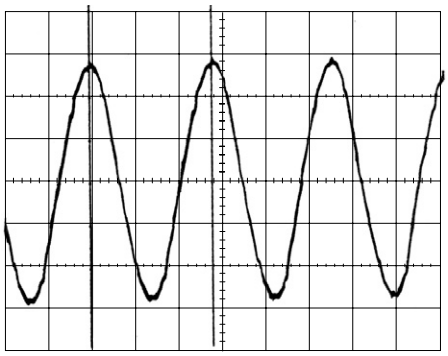
0.5 V/div
10 µs/div

⑫ IC407 PIN 4 (V-IN)



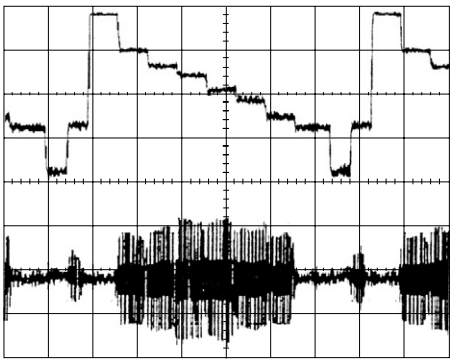
0.2 V/div
10 µs/div

⑬ IC407 PIN 10 (FSC-IN)



0.2 V/div
0.1 µs/div

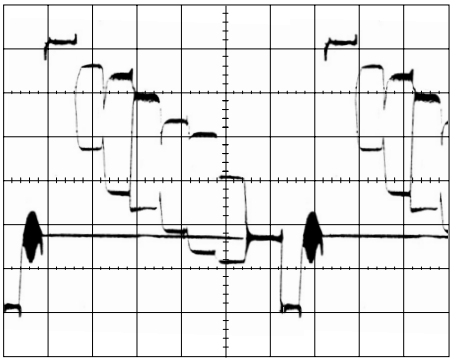
⑭ IC407 PIN 13 (C-OUT)
⑮ IC407 PIN 15 (Y-OUT)



0.5 V/div
10 µs/div

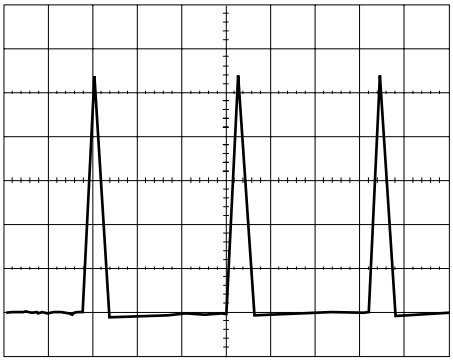
0.2 V/div
10 µs/div

⑯ Q309 EMITTER



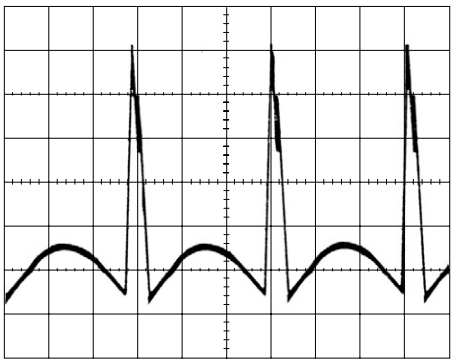
0.2 V/div
10 µs/div

⑰ CN601 PIN 1 (H+)



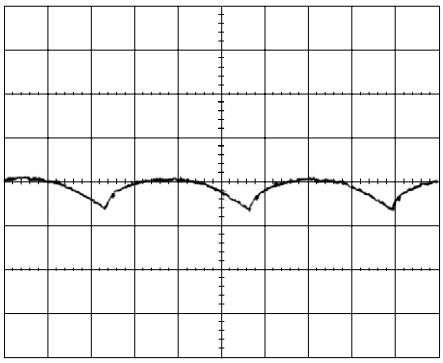
200 V/div
20 µs/div

⑱ CN601 PIN 2 (H-)



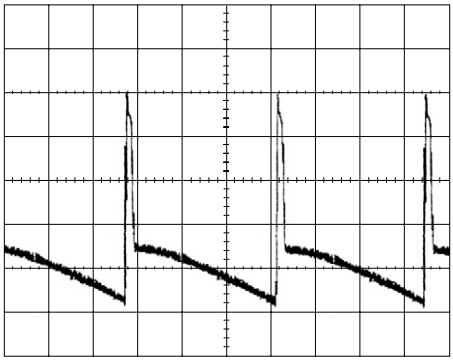
50 V/div
20 µs/div

⑲ CN601 PIN 4 (V-)



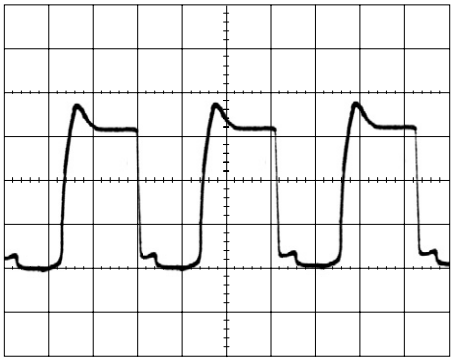
5 V/div
5 ms/div

⑳ CN601 PIN 5 (V+)



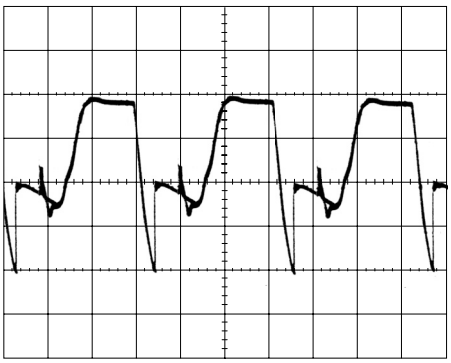
10 V/div
5 ms/div

㉑ Q601 COLLECTOR



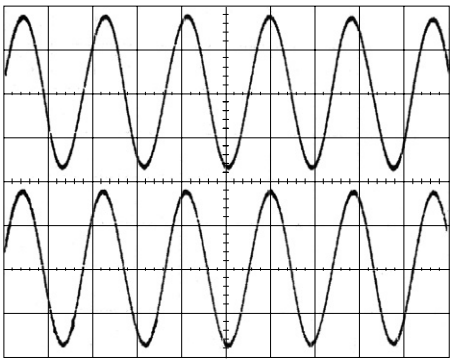
50 V/div
20 µs/div

㉒ T602 PIN 3



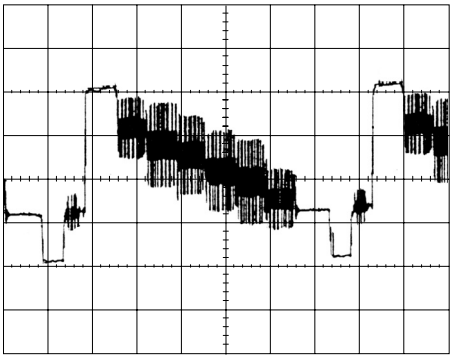
20 V/div
20 µs/div

㉓ Q751 (EMITTER)
㉔ Q752 (EMITTER)



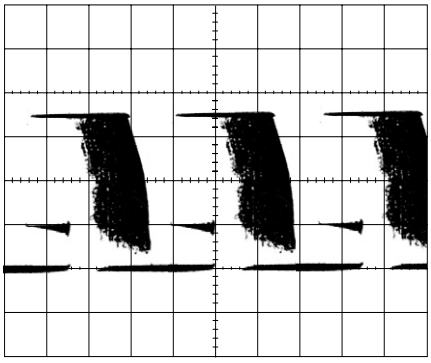
0.2 V/div
0.5 ms/div

㉕ J702 (VIDEO OUTPUT)



0.5 V/div
10 µs/div

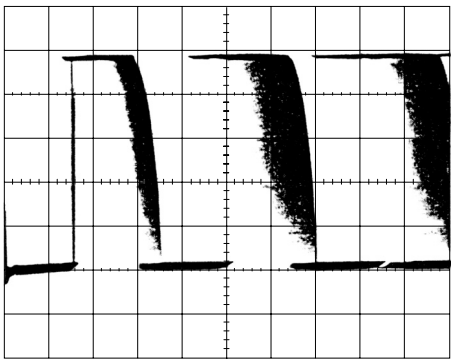
㉖ D823 ANODE (at POWER ON)



10 V/div
5 µs/div

㉗ D827 ANODE (at POWER ON)

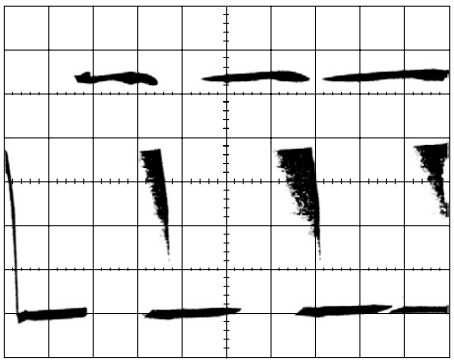
㉗



50 V/div
5 µs/div

㉘ D822 ANODE (at POWER ON)

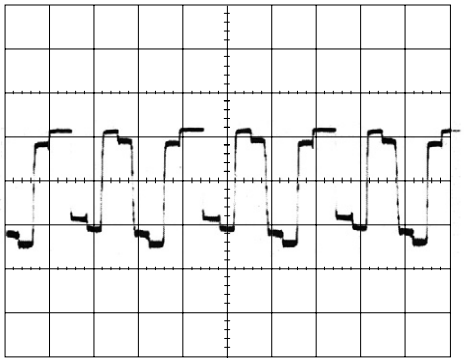
㉘



5 V/div
5 µs/div

㉙ Q901 COLLECTOR (R-DRIVE)

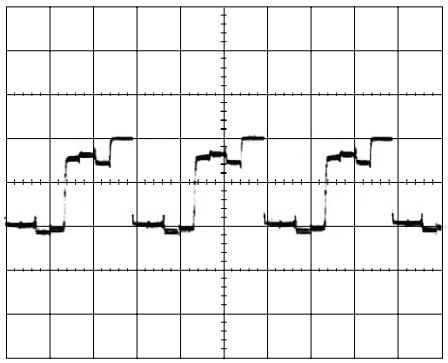
㉙



50 V/div
20 µs/div

㉚ Q902 COLLECTOR (G-DRIVE)

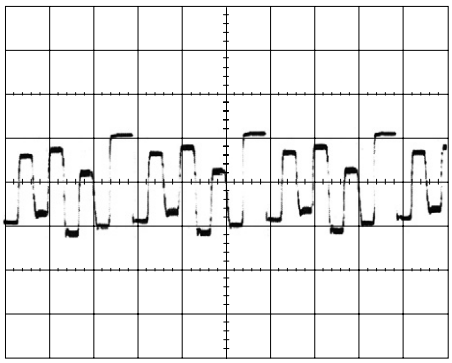
㉚



50 V/div
20 µs/div

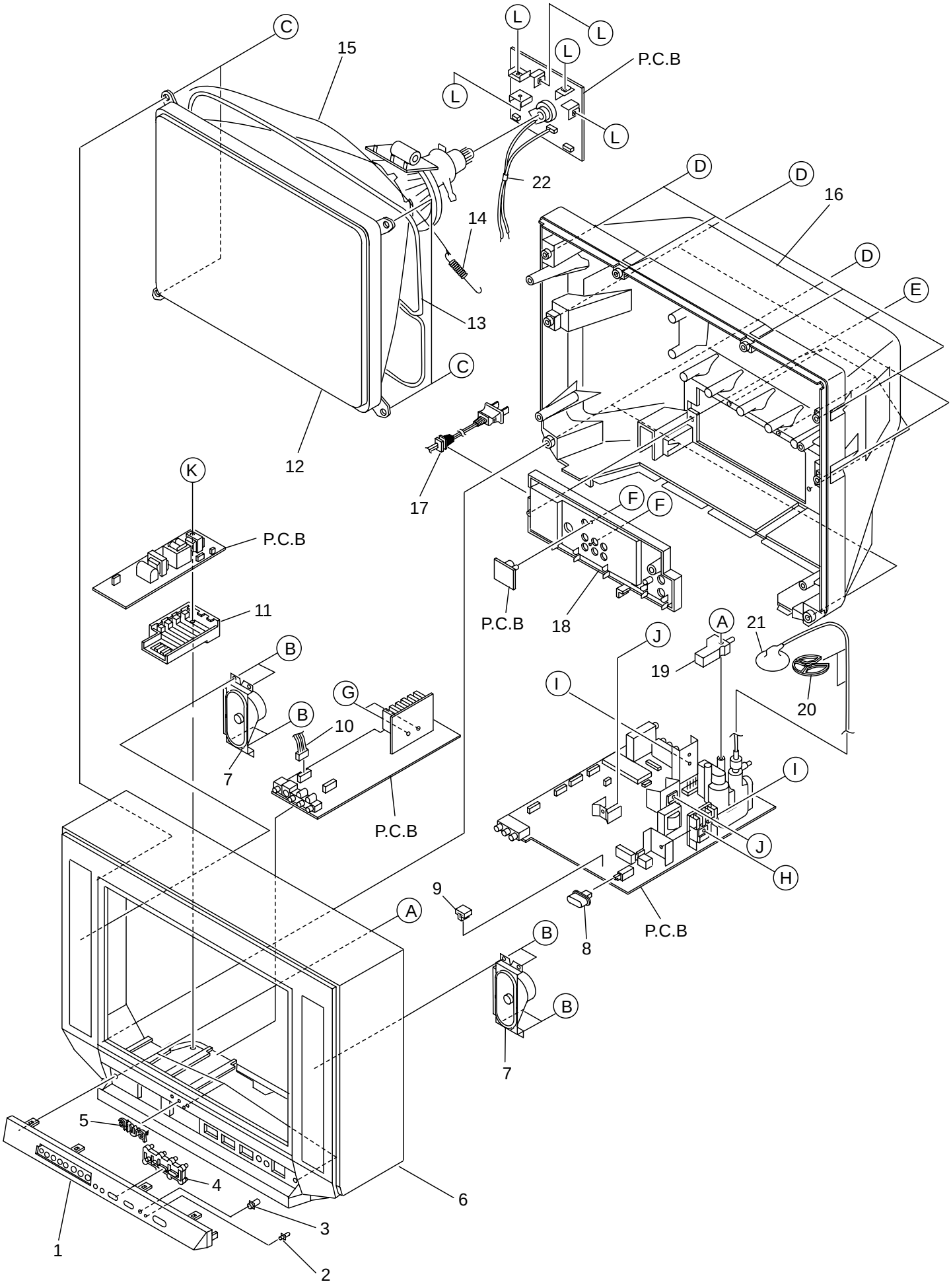
㉛ Q903 COLLECTOR (B-DRIVE)

㉛



50 V/div
20 µs/div

MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JE5-003-010		PANEL,MAIN U
2	8Z-JE7-005-010		LENS,LED
3	8Z-JE7-006-010		LENS,RC
4	8A-JE7-003-010		KEY,MAIN 3
5	8Z-JE7-008-010		BADGE,AIWA ST 52.5
6	8A-JE5-006-010		CABI,FR U ASSY
7	8Z-JB3-620-010		SPKR,6*12 8OHM 15W
8	8A-JE7-004-010		BTN,POWER 3
9	84-LB3-216-010		HLDR,LED
10	8Z-JE5-640-010		CONN ASSY,4P SP-25
11	8Z-JE5-205-110		HLDR,PWB
⚠ 12	8A-JE5-607-010		CRT,A60LST196(0.45)
⚠ 13	8Z-JE5-625-010		COIL,DGC 25-F
14	83-JT1-217-010		SPR-E,EARTH
15	8Z-JE5-607-010		CONN ASSY,1P CRT-GND
16	8A-JE5-002-010		CABI,REAR U
⚠ 17	8A-JE5-616-010		AC CORD ASSY,USA LK
18	8A-JE5-004-010		PANEL,REAR U
19	8Z-JE5-202-010		HLDR,FBT-25
20	87-A90-332-010		HLDR,SF-2001 HV CABLE
21	8Z-JE7-609-010		ANODE-CAP,ZJE-7
22	8Z-JE7-610-010		HV-CABLE, 2P ZJE-7FOC-SCR
A	87-067-680-010		BVI T3+3-10
B	87-078-070-010		BVIT3B+4-12
C	86-LBB-206-010		S-SCREW,ASSY TV5-40 W20
D	87-067-844-010		BVT2+4-16 BLK
E	87-067-690-010		TAPPING SCREW, BVIT3+3-12
F	87-067-761-010		TAPPING SCREW, BVT2+3-10
G	87-067-688-010		BVTT+3-6
H	87-067-619-010		BVT1+3-12
I	87-067-579-010		TAPPING SCREW, BVT2+3-8
J	87-067-758-010		BVT2+3-12 W/O SLOT
K	87-067-822-010		BVT2+3-20 W/O SLOT
L	87-067-641-010		UTT2+3-8(W/O SLOT)BL

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

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